

**Volume I of I, Pages A1 – A90283
Nos. 2013-1150, 2013-1182**

**UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT**

APPLE INC.,

Plaintiff-Appellant,

— v. —

MOTOROLA MOBILITY LLC,

Defendant-Cross-Appellant.

Appeals from the United States District Court for the Western District
of Wisconsin in No. 11-CV-0178, Senior Judge Barbara B. Crabb

NONCONFIDENTIAL JOINT APPENDIX

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January 16, 2014

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UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

In the Matter of

CERTAIN WIRELESS COMMUNICATION
DEVICES, PORTABLE MUSIC AND
DATA PROCESSING DEVICES,
COMPUTERS AND COMPONENTS
THEREOF

Inv. No. 337-TA-745

Order No. 1: Protective Order

WHEREAS, documents and information may be sought, produced or exhibited by and among the parties to the above captioned proceeding, which materials relate to trade secrets or other confidential research, development or commercial information, as such terms are used in the Commission's Rules, 19 C.F.R. Section 210.34(a)(7),

IT IS HEREBY ORDERED THAT:

1. Confidential business information is information which has not been made public and which concerns or relates to the trade secrets, processes, operations, style of work, or apparatus, or to the production, sales, shipments, purchases, transfers, identification of customers, inventories, amount or source of any income, profits, losses, or expenditures of any person, firm, partnership, corporation, or other organization, the disclosure of which information is likely to have the effect of either (1) impairing the Commission's ability to obtain such information as is necessary to perform its statutory functions, or (2) causing substantial harm to the competitive position of the person, firm, partnership, corporation, or other organization from which the information was obtained, unless the Commission is required by law to disclose such information.

2. Any information submitted, either voluntarily or pursuant to order, in this investigation, which is asserted by a supplier to contain or constitute confidential business information shall be so designated by such supplier in writing, or orally at a deposition, conference or hearing, and shall be segregated from other information being submitted. Documents shall be clearly and prominently marked on their face with the legend: "[supplier's name] CONFIDENTIAL BUSINESS INFORMATION, SUBJECT TO PROTECTIVE ORDER," or a comparable notice. Information obtained during discovery and asserted by the supplier to be confidential under this order will be deemed to be confidential unless the administrative law judge or the Commission rules that it is not. When such information is made part of a pleading, or is offered into the evidentiary record, the party offering it must state the basis for its claimed confidentiality. Confidential information whether submitted in writing or in oral testimony shall be disclosed at a hearing only on the in camera record and shall not be made part of the public record of this proceeding. The administrative law judge or the Commission may determine that information alleged to be confidential is not confidential, or that its disclosure is necessary for the proper disposition of the proceeding, at any time before, during or after the close of the hearing herein. If such a determination is made by the administrative law judge, opportunity shall be provided to the supplier of such information to argue its confidentiality, prior to the time that such ruling becomes final.

3. In the absence of written permission from the supplier or an order by the Commission or the administrative law judge, any confidential documents or business information submitted in accordance with the provisions of paragraph 2 above shall not be disclosed to any person other than: (i) outside counsel for parties to this investigation, including necessary secretarial and

clerical personnel assisting such counsel, (ii) qualified persons taking testimony involving such documents or information and necessary stenographic and clerical personnel thereof, (iii) technical experts and their staff who are employed by outside counsel under (i) above for the purposes of this litigation (unless they are otherwise employed by, consultants to, or otherwise affiliated with a non-governmental party, or are employees of any domestic or foreign manufacturer, wholesaler, retailer, or distributor of wireless communication devices, portable music and data processing devices, computers and components thereof, which are the subject of this investigation), and (iv) the Commission, the administrative law judge, the Commission staff, and personnel of any governmental agency as authorized by the Commission. However see Commission rule 210.5 (b) which conforms to 19 U.S.C. § 1337(n)(2), which clarifies the list of government officers and employees who may have access to confidential business information, and (c) which alerts suppliers to the possibility that confidential business information may be transmitted to a federal district court, subject to such protective order as the district court determines necessary. This result might occur in a limited class of cases because of 28 U.S.C. § 1659. Past Commission practice has been to permit the transfer of confidential business information to another court only with permission of the supplier of the information. Particularly where the supplier is a third party who is involved in neither the Commission investigation nor the district court case, it is important that the supplier be made aware that treatment of confidential information would be governed by the district court's protective order and not that of the Commission following transmittal of the record under this provision. See also Commission rule 210.39 which outlines the circumstances in which the Commission's record, including the in camera record, may be transmitted to a federal district court, subject to such

protective order as the district court determines necessary. In addition, referring to Commission Administrative Order No. 97-06, dated February 4, 1997, information submitted under this Protective Order may be disclosed to technical contract personnel who are acting in the capacity of Commission employees, for developing or maintaining the records of this investigation or related proceedings, or in internal audits and investigations relating to the programs and operations of the Commission pursuant to 5 U.S.C. Appendix 3. Any contract personnel will sign appropriate non-disclosure agreements.¹ Where the supplier of information under this order is a third party who is not involved in the Commission investigation, it is important that the supplier be made aware of the disclosure of such information to contract personnel by being provided a copy of the protective order.

4. Confidential business information submitted in accordance with the provisions of paragraph 2 above shall not be made available to any person designated in paragraph 3(i) and (iii) unless he or she shall have first read this order and shall have agreed, by letter filed with the Secretary of this Commission (letter of acknowledgment): (i) to be bound by the terms thereof; (ii) not to reveal such confidential business information to anyone other than another person designated in paragraph 3; and (iii) to utilize such confidential business information solely for purposes of this investigation. Such letter shall also acknowledge that the signatory(ies) has (have) read the order. Such letter shall further state which parties the person filing the letter is involved with and shall state in what capacity he or she is a signatory to the Protective Order (e.g., as an attorney under Paragraph 3(i) or technical expert under Paragraph 3(iii) and, in the

¹ A supplier of confidential business information may request that the administrative law judge identify said contract personnel.

case of an attorney, in what jurisdictions he or she is admitted to practice. Each attorney seeking access to confidential business information shall sign such letter individually, but clerical and support personnel (including law clerks and paralegals) of that attorney need not sign. All letters of acknowledgment of this Protective Order shall be served on all non-parties who have theretofore submitted confidential business information in accordance with the provisions of paragraph 2, above.

5. Confidential business information obtained in the Commission proceeding may be used with the consent of the supplier in a parallel district court proceeding under a protective order issued by the district court without losing its confidential status under the protective order in this proceeding as long as the information is not made public in the district court proceeding or by someone who obtains the information from that source or by anyone else.

6. Confidential business information furnished by a supplier may lose its protection under this order if it is disseminated to anyone not authorized to see it either by this protective order or by a protective order issued by a district court in a parallel proceeding protecting confidential business information obtained by the parties under the Commission's protective order. Information obtained pursuant to the Commission's protective order, however, may be produced to the district court under the district court protective order only with the consent of the suppliers of that information.

7. If the Commission or the administrative law judge orders, or if the supplier and all parties to the investigation agree, that access to, or dissemination of, information submitted as confidential business information shall be made to persons not included in paragraphs 3, 5 or 6 above, such matter shall only be accessible to, or disseminated to, such persons based on the

conditions pertaining to, and obligations arising from, this order, and such persons shall be considered subject to it unless the Commission or the administrative law judge finds that the information is not confidential business information as defined in paragraph 1 hereof.

8. Any confidential business information submitted to the Commission or the administrative law judge in connection with a motion or other proceeding within the purview of this investigation shall be submitted under a designation that confidential information is contained or attached therein, pursuant to paragraph 2 above. When any confidential business information submitted in accordance with paragraph 2 above is included in an authorized transcript of a deposition or exhibits thereto, arrangements shall be made with the court reporter taking the deposition to bind such confidential portions and separately label them "[supplier's name], CONFIDENTIAL BUSINESS INFORMATION, SUBJECT TO PROTECTIVE ORDER." Before a court reporter receives any such information, he or she shall have first read this order and shall have agreed in writing to be bound by the terms thereof. Alternatively, he or she shall sign the agreement included as Attachment A hereto. Copies of each such signed agreement shall be provided to the supplier of such confidential business information and to the Secretary of the Commission.

9. The restrictions upon, and obligations accruing to, persons who become subject to this order shall not apply to any information submitted in accordance with paragraph 2 above to which the person asserting the confidential status thereof agrees in writing, or the Commission or the administrative law judge rules, after proper notice and hearing, was publicly known at the time it was supplied to the receiving party or has since become publicly known through no fault of the receiving party.

10. The administrative law judge acknowledges that any document or information submitted as confidential business information pursuant to paragraph 2 above is to be treated as such within the meaning of 5 U.S.C. § 522(b)(4) and 18 U.S.C. § 1905, subject to a challenge by any party pursuant to paragraph 12 below or to a final ruling by the Commission, the administrative law judge or its Freedom of Information Act Officer to the contrary, or by appeal of such a ruling, interlocutory or otherwise.

11. If no determination has been made by the administrative law judge or the Commission that the information designated as confidential by the submitter is not confidential, the persons who are recipients of such information shall take all necessary and proper steps to preserve the confidentiality of, and to protect each supplier's rights with respect to, any confidential business information designated by the supplier in accordance with paragraph 2 above.

12. The supplier of any confidential information is hereby notified that Commission regulations 19 C.F.R. § 201.19(c) through (e) generally require that the Commission will give notice to a submitter of confidential information upon the Commission's receipt of an FOIA request.

13. The supplier of any confidential information is put on notice that Commission rule 210.20 provides that only a party may move to declassify and that only then are such motions, whether brought at any time during or after the conclusion of an investigation, addressed to and ruled upon by an administrative law judge. Other requests to declassify made by non-parties, such as an FOIA request, will not be referred to the administrative law judge for consideration under the protective order.

14. If a party to this order who is a recipient of any business information designated as confidential and submitted in accordance with paragraph 2, disagrees with respect to such a designation, in full or in part, it shall notify the supplier in writing, and they will thereupon confer as to the status of the subject information proffered within the context of this order. If prior to, or at the time of, such a conference, the supplier withdraws its designation of such information as being subject to this order, but nonetheless submits such information for purposes of the investigation, such supplier shall express the withdrawal in writing and shall serve such withdrawal upon all parties, the administrative law judge, and the Commission investigative attorney. If the recipient and supplier are unable to concur upon the status of the subject information submitted as confidential business information within ten days from the date of notification of such disagreement, any party to this order may raise the issue of the designation of such a status to the Commission or to the administrative law judge, and the Commission or the administrative law judge may raise the issue of designation of the confidential status without any request from a party. Upon notice that such confidential status of information is at issue, the party to the investigation which submitted the information and designated it as confidential shall have the burden of proving such confidential status.

15. No less than ten days (or any other period of time designated by the administrative law judge) prior to the initial disclosure to the proposed expert of any confidential information submitted in accordance with paragraph 2, the party proposing to use such expert shall submit in writing the name of such proposed expert and his or her educational and employment history to the supplier. If the supplier objects to the disclosure of such confidential business information to such proposed expert as inconsistent with the language or intent of this order or on other

grounds, it shall notify the recipient in writing of its objection and the grounds therefor prior to the initial disclosure. If the dispute is not resolved on an informal basis within ten days of receipt of such notice of objection, motion may be made to the administrative law judge for a ruling on such objection. The submission of such confidential business information to such proposed expert shall be withheld pending the ruling of the administrative law judge. The terms of this paragraph shall be inapplicable to experts within the Commission or to experts from other governmental agencies who are consulted with, or used by, the Commission.

16. If confidential business information submitted in accordance with paragraph 2 is disclosed to any person other than in the manner authorized by this protective order, the party responsible for the disclosure must immediately bring all pertinent facts relating to such disclosure to the attention of the supplier and the administrative law judge and, without prejudice to other rights and remedies of the supplier, make every effort to prevent further disclosure by it or by the person who was the recipient of such information.

17. Nothing in this order shall abridge the right of any person to seek judicial review or to pursue other appropriate judicial action with respect to any ruling made by the Commission, its Freedom of Information Act Officer, or the administrative law judge concerning the issue of the status of confidential business information.

18. Upon final termination of this investigation, each party that is subject to this order shall destroy or return to the supplier all items containing confidential business information submitted in accordance with paragraph 2 above, including all copies of such matter which may have been made, but not including copies containing notes or other attorney's work product that may have been placed thereon by counsel for the receiving party. All copies containing such

notes or other attorney's work product shall be destroyed. Receipt of material returned to the supplier shall be acknowledged in writing. This paragraph shall not apply to the Commission, including its investigative attorney, and the administrative law judge, which shall retain such material pursuant to statutory requirements and for other recordkeeping purposes, but may destroy those additional copies in its possession which are regarded as surplusage.

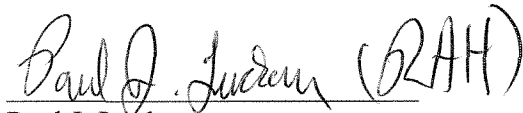
19. If any confidential business information which is supplied in accordance with paragraph 2 above is supplied by a non-party to this investigation, such a non-party shall be considered a "supplier" within the meaning of that term as it is used in the context of this order.

20. At or before the final termination of the investigation, copies of confidential information that was in the hands of expert witnesses must be retrieved or destroyed.

21. Except as provided in Commission rule 210.20, the jurisdiction of the administrative law judge over this order terminates upon filing of the initial determination issued at the end of the case. After that date, the Commission has jurisdiction to enforce this order and to issue reprimands and other sanctions.

22. The parties may move to amend this order, but any proposed amendment that would broaden the range of persons having access to confidential business information must be proposed and adopted before such information is supplied in reliance upon the terms of this order, unless all suppliers of confidential information consent to the amendment.

23. The Secretary shall serve a copy of this order upon all parties.



Paul J. Luckern

Chief Administrative Law Judge

Issued: November 3, 2010

ATTACHMENT A

NONDISCLOSURE AGREEMENT FOR REPORTER/STENOGRAPHER/TRANSLATOR

I, _____, do solemnly swear that I will not divulge any information communicated to me in any confidential portion of the investigation or hearing in Certain Wireless Communication Devices, Portable Music and Data Processing Devices, Computers and Components Thereof, Inv. No. 337-TA-745, except as permitted in the protective order issued in this case. I will not directly or indirectly use, or allow the use of such information for any purpose other than that directly associated with my official duties in this case.

Further, I will not by direct action, discussion, recommendation, or suggestion to any person reveal the nature of content of any information communicated during any confidential portion of the investigation or hearing in this case.

I also affirm that I do not hold any position or official relationship with any of the participants in said investigation.

I am aware that the unauthorized use or conveyance of information as specified above is a violation of the Federal Criminal Code and punishable by a fine of up to \$10,000, imprisonment of up to ten (10) years, or both.

Signed _____

Dated _____

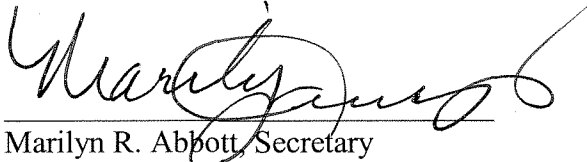
Firm or affiliation

**CERTAIN WIRELESS COMMUNICATION DEVICES,
PORTABLE MUSIC AND DATA PROCESSING DEVICES,
COMPUTERS AND COMPONENTS THEREOF**

Inv. No. 337-TA-745

CERTIFICATE OF SERVICE

I, Marilyn R. Abbott, hereby certify that the attached **Order** has been served by hand upon the Commission Investigative Attorney, Kevin G. Baer, Esq., and the following parties as indicated, on November 4, 2010.



Marilyn R. Abbott, Secretary
U.S. International Trade Commission
500 E Street, SW
Washington, DC 20436

On Behalf of Complainants Motorola Mobility, Inc.:

Charles F. Schill, Esq.
Steptoe & Johnson LLP
1330 Connecticut Avenue, NW
Washington, DC 20036

☐ Via Hand Delivery
☐ Via Overnight Mail
☒ Via First Class Mail
☐ Other: _____

Respondent:

Apple Inc.
1 Infinite Loop
Cupertino, CA 95014

☐ Via Hand Delivery
☐ Via Overnight Mail
☒ Via First Class Mail
☐ Other: _____

3:11cv178:

12	03/16/2011	** TEXT ONLY ORDER ** ORDER granting 2 Motion to Seal Documents by Plaintiff Apple Inc. Signed by Magistrate Judge Stephen L. Crocker on 3/16/2011. (arw) (Entered: 03/16/2011)
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3:11cv178:

18	03/25/2011	** TEXT ONLY ORDER ** ORDER granting 16 Motion to Seal by Plaintiff Apple Inc., granting 14 Joint Motion for Modification of Scheduling Order. Brief in Opposition re: 3 Motion for Preliminary Injunction due 4/8/2011. Brief in Reply due 4/15/2011. Defendant Motorola Mobility, Inc. answer due 4/8/2011. Signed by Magistrate Judge Peter Oppeneer on 3/25/2011. (arw) (Entered: 03/25/2011)
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3:11cv178:

46	04/11/2011	** TEXT ONLY ORDER ** ORDER granting 32 Motion to Seal by Defendant Motorola Mobility, Inc. Signed by Magistrate Judge Stephen L. Crocker on 4/11/2011. (arw) (Entered: 04/11/2011)
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3:11-cv-00178-bbc:

04/15/2011 58 ** TEXT ONLY ORDER **

ORDER granting 54 Motion to Seal by Plaintiff Apple Inc. Signed by Magistrate Judge Stephen L. Crocker on 4/15/2011. (arw) (Entered: 04/15/2011)

3:11-cv-00178-bbc:

04/18/2011 66 ** TEXT ONLY ORDER **

ORDER granting 60 Motion to Seal by Plaintiff Apple Inc. Signed by Magistrate Judge Stephen L. Crocker on 4/18/2011. (arw) (Entered: 04/18/2011)

3:11-cv-00178-bbc:

04/25/2011 78 ** TEXT ONLY ORDER **

ORDER granting 74 Motion to Seal Reply in Support of Motion to Strike. Signed by Magistrate Judge Stephen L. Crocker on 4/25/2011. (arw) (Entered: 04/25/2011)

3:11-cv-00178-bbc:

05/02/2011 84 ** TEXT ONLY ORDER **

ORDER granting 83 Motion to Seal by Plaintiff Apple Inc. Signed by Magistrate Judge Stephen L. Crocker on 5/2/2011. (arw) (Entered: 05/02/2011)

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

APPLE, INC.,

Plaintiff,

v.

MOTOROLA MOBILITY, INC.,

Defendant.

ORDER

11-cv-178-bbc

For the reasons stated from the bench at the conclusion of the hearing on plaintiff Apple, Inc.'s motion for a preliminary injunction, the motion is DENIED. Counsel are to advise the court no later than May 6, 2011, whether they want a scheduling conference before the court to discuss the reorganization of case no. 10-cv-662-bbc and other scheduling matters.

Entered this 29th day of April, 2011.

BY THE COURT:

/s/

BARBARA B. CRABB

District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

APPLE, INC.,

Plaintiff,

v.

MOTOROLA MOBILITY, INC.,

Defendant.

OPINION and ORDER

11-cv-178-bbc

This case originated in the International Trade Commission, where defendant Motorola, Inc. filed an infringement action against plaintiff Apple, Inc. and is seeking an exclusion order that would prevent Apple from selling its allegedly infringing products in the United States. After the case had been pending for a few months in the Commission, Apple filed 13 counterclaims against Motorola and removed the case to this court under 19 U.S.C. § 1337(c). In its counterclaims, Apple alleges that Motorola has engaged in a pattern of unfair, deceptive and anticompetitive conduct by failing to timely disclose ownership of patents that it now declares are essential to technological standards that have been adopted by the industry and by failing to offer licenses to those patents on fair, reasonable and nondiscriminatory terms.

Now before the court is Motorola's motion to dismiss Apple's claims for lack of

ripeness and for failure to state claims upon which relief may be granted. Dkt. #33. Also before the court is Motorola's motion to sever the claims in this case and consolidate them with the claims in two other cases that are pending before this court. Dkt. #39.

I conclude that Apple's claims are ripe and that they are pleaded sufficiently. Thus, I will deny Motorola's motion to dismiss, with the exception of its motion to dismiss Apple's claim of waiver because waiver is an affirmative defense, not a cause of action. I also conclude that severing this case would create inordinate complications and would not promote judicial economy or efficiency. Accordingly, I will deny Motorola's motion to sever and consolidate the case.

I draw the following facts from plaintiff Apple's counterclaims. (Although Apple is named as the plaintiff in this action, Apple's claims are technically "counterclaims" because it was the respondent in the International Trade Commission where it first filed these counterclaims against Motorola.)

BACKGROUND

A. Wireless Communication Industry and Standards Setting Organizations

Plaintiff Apple Inc. and defendant Motorola Mobility, Inc. are competitors in the wireless communication industry. Motorola is the owner of several patents that it has declared as being "essential patents" with respect to various technological standards set by international standards setting organizations relevant to wireless communication devices.

Standards setting organizations play a significant role in the wireless technology market by allowing companies to agree on common technological standards so that all compliant products will work together. Standards lower costs by increasing product manufacturing volume and they increase price competition by eliminating “switching costs” for consumers who desire to switch from products manufactured by one firm to those manufactured by another.

One complication with standards is that it may be necessary to use patented technology in order to practice them. If a patent claims technology selected by a standards setting organization, the patent is called an “essential patent.” In order to reduce the likelihood that owners of essential patents will abuse their market power, many standards setting organizations have adopted rules related to the disclosure and licensing of essential patents. The policies often require or encourage members of the standards setting organization to identify patents that are essential to a proposed standard and to agree to license their standard essential patents on fair, reasonable and non-discriminatory terms to anyone who requests a license. (These terms are often referred to by the acronyms FRAND or RAND.) Such rules help to insure that standards do not allow essential patent owners to extort their competitors or prevent them from entering the marketplace.

There are four standards setting organizations relevant to this case: The European Telecommunications Standards Institute; the 3rd Generation Partnership Project, known as 3G; the Telecommunications Standards Institute; and the Institute of Electrical and

Electronics Engineers. As discussed in more detail below, each of these standards setting organizations have intellectual property rights policies that address disclosure and licensing of patents essential to standards being considered or being adopted by the organizations. At all relevant times, Motorola has been a member of several standards setting organizations, including those relevant to this case.

B. Motorola's Declarations of Essential Patents and
Commitments to License those Patents

During the course of its participation in developing standards for the European Telecommunications Standards Institute and the 3G Project, Motorola submitted “declarations,” declaring that the ‘697, ‘559, ‘230 and ‘898 patents were essential or potentially essential to the European Telecommunications Standards Institute’s standards, including the Global System for Mobile Communications (known as the GSM standard), Universal Mobile Telecommunications System (known as the UMTS standard) and 3G Project standards. Motorola also declared that those four patents were essential to standards that had already been adopted by the Institute and 3G Project. Motorola represented to the Institute and the 3G Project that it would “grant irrevocable licences under the [intellectual property rights] on terms and conditions which are in accordance with . . . the [Institute’s] [intellectual property rights] Policy.” Apple’s Cpt., dkt. #1, ¶¶ 71-75.

Additionally, Motorola declared the ‘223 patent essential to the 802.11 standard and

submitted an Intellectual Property Statement to the Institute of Electrical and Electronics Engineers, stating that Motorola agreed to license any patents essential to the 802.11 standard on a non-discriminatory basis offering fair and commercially reasonable terms. In a Letter of Assurance for Essential Patent Claims dated June 14, 2007, Motorola declared that the '712 patent and the '193 patent were essential to the practice of the 802.16e standard. The 802.16e Letter of Assurance stated that Motorola was prepared to grant licenses to an "unrestricted number of applicants on a worldwide, non-discriminatory basis with reasonable terms and conditions." Id. at ¶ 88.

Finally, in a "Statement from the Patent Holder" to the Telecommunication Industry Association, Motorola declared that the '697, '712 and '193 patents were essential to the CDMA2000 standard. Motorola stated that it would make a license available for any declared-essential patent "under reasonable terms and conditions that are demonstrably free of any unfair discrimination" Id. at ¶ 99.

C. Negotiations for Licensing between Apple and Motorola

Apple's original iPhone went on sale in June 2007. Apple's original iPhone contained an Infineon baseband chipset, which incorporated technology covered by patents that Motorola has declared as essential. Apple purchased the Infineon baseband chipset through a manufacturing agreement with Chi Mei Corporation, which manufactured the Infineon baseband chipset under a licensing agreement with Motorola. On August 4, 2007, Motorola

gave Chi Mei a 60-day suspension notice on its licensing agreement.

In September 2007, representatives of Apple and Motorola met to discuss a licensing agreement regarding Motorola's declared-essential patents. At the meeting, Motorola demanded a royalty rate based on the total revenue of the covered devices. Apple believes the rate is unreasonably high and that the value and contribution of the declared-essential patents is disproportionate to the revenue received by Apple for sales of its products. In addition, the demanded rate was higher than the rate Motorola has offered to other competitors. The parties have negotiated on and off for three years but have been unable to agree on licensing terms.

D. Motorola's Termination of the Qualcomm License

On December 16, 2009, Apple and Qualcomm entered into a contract whereby Apple would purchase chipsets from Qualcomm that were compliant with the CDMA2000 standard. The chipsets incorporated technology that Qualcomm licensed from Motorola. On January 11, 2011, on the day Apple announced the Verizon iPhone 4, Motorola notified Qualcomm of its intent to terminate any and all license covenant rights with respect to Qualcomm's business with Apple, effective February 10, 2011.

PROCEDURAL HISTORY

A. Related Cases

Three pending actions relate to the present case. First, there is the investigation pending in the International Trade Commission that defendant Motorola initiated on October 6, 2010. In the Matter of Certain Wireless Communication Devices, Portable Music and Data Processing Devices, Computers and Components Thereof, ITC Investigation No. 337-TA-745. In that case, Motorola is seeking an exclusion order and a permanent cease and desist order as a result of plaintiff Apple's alleged infringement of United States Patent Nos. 6,272,333 (the '333 patent), 6,246,862 (the '862 patent), 5,359,317 (the '317 patent), 7,751,826 (the '826 patent), 6,246,697 (the '697 patent), and 5,636,223 (the '223 patent). As an affirmative defense to infringement, Apple contends that Motorola's license terms for its essential patent portfolio are not fair, reasonable and non-discriminatory. The case is scheduled for a hearing in July 2011. The Commission has set a target date of March 8, 2012, at which time the Commission expects to complete its final review of the matter.

The other two related cases are pending in this court. Plaintiff Apple filed case number 10-cv-661-bbc on October 29, 2010, asserting patent infringement claims against Motorola. On November 9, 2010, Motorola filed counterclaims in the '661 action alleging infringement of the '317 patent, the '223 patent, the '697 patent, the '862 patent, the '333 patent and the '826 patent. These are the same patents at issue in the International Trade Commission's 337-TA-745 investigation. On December 2, 2010, this court granted the parties' joint motion to stay the '661 case in favor of the proceedings in the Commission.

Also on October 29, 2010, plaintiff Apple filed case number 10-cv-662-bbc, asserting

patent infringement claims against Motorola. On November 9, 2010, Motorola filed counterclaims against Apple for infringement of United States patent Nos. 5,311,516 (the '516 patent), 5,319,712 (the '712 patent), 5,490,230 (the '230 patent), 5,572,193 (the '193 patent), 6,175,559 (the '559 patent) and 6,359,898 (the '898 patent), all of which Motorola has declared essential to certain standards. In that case, Apple contests whether the patents are essential to standards it is practicing and contests the validity of the patents. One of Apple's affirmative defenses in that case is that Motorola's license offer was not consistent with its obligations to license the patents on fair, reasonable and non-discriminatory terms. The '662 case is not stayed.

B. The Case at Issue (11-cv-178-bbc)

In this case, Apple alleges that Motorola has engaged in a pattern of unfair, deceptive and anticompetitive conduct by failing to timely disclose ownership of patents that it now declares are essential to standards that have been adopted by the industry. The patents that Motorola has declared essential are the '223, '697, '712, '230, '193, '559 and '898 patents. Additionally, Apple contends that Motorola's refusal to negotiate a license in good faith with Apple for those declared-essential patents constitutes a breach of commitments Motorola made to several standards setting organizations to license essential patents on fair, reasonable and non-discriminatory terms. Apple also asserts claims against Motorola under the theory of estoppel and waiver. Apple contends that by making commitments to the standards

setting organizations, Motorola promised potential licensees that it would license its essential patents on fair, reasonable and non-discriminatory terms. Because wireless device companies, like Apple, relied on its promise, Motorola is estopped to deny it.

Also, Apple brings causes of action for tortious interference with a contract, unfair competition and unlawful business practices and violation of Section 2 of the Sherman Act for Motorola's refusal to license fairly, its failure to disclose essential patents and its interference with the contract between Apple and Qualcomm. Finally, Apple brings three declaratory judgment claims, seeking declarations that (1) Motorola's offers have not been on fair, reasonable and non-discriminatory terms; (2) Motorola is not entitled to injunctive relief in the event it prevails on any of its patent infringement claims; and (3) Motorola has misused its patents.

Shortly after Apple removed this case to federal court, it moved for preliminary injunctive relief, seeking an order that would have enjoined Motorola from (1) proceeding as a party in the 337-TA-745 investigation in the International Trade Commission with respect to the '223 and '697 patents; (2) proceeding with its counterclaims filed in case number 10-cv-662-bbc in this court with respect to the '712, '230, '193, '559 and '898 patents; and (3) selectively terminating its patent license agreement with Qualcomm as to Apple. A hearing was held on the motion on April 26, 2011. At the conclusion of the hearing, I denied Apple's motion for a preliminary injunction because I did not see a likelihood of success on the merits of its claims, did not think it appropriate to interfere with

an International Trade Commission proceeding under the circumstances, did not think that Apple had shown any irreparable harm and found that the public interest would be served by allowing the International Trade Commission to proceed with its investigation and trial.

While the parties were briefing Apple's motion for a preliminary injunction, Motorola filed a motion to dismiss Apple's counterclaims, contending that certain of Apple's claims are not ripe and that all of Apple's claims suffer from pleading problems. Dkt. #33. Also, Motorola filed a motion to sever and consolidate the claims in this action with the '661 and '662 cases. Dkt. #39.

OPINION

A. Motion to Dismiss

1. Ripeness

With the exception of its tortious interference claim, all of Apple's counterclaims focus on Motorola's alleged commitments to license its essential patents to Apple on fair, reasonable and non-discriminatory terms and its failure to do so. Motorola contends that all of Apple's counterclaims should be dismissed under Fed. R. Civ. P. 12(b)(1) because they will not be ripe until the parties' patent infringement disputes are resolved.

Ripeness is essentially a question of timing, and depends on whether the plaintiff's threatened injury is sufficiently imminent to warrant judicial action. Regional Rail Reorganization Act Cases, 419 U.S. 102, 143 (1974). To establish ripeness, plaintiffs must

demonstrate both (1) the fitness of the issues for judicial decision and (2) the “hardship to the parties of withholding court consideration.” Abbott Laboratories v. Gardner, 387 U.S. 136, 149 (1967); Metropolitan Milwaukee Association of Commerce v. Milwaukee County, 325 F.3d 879, 882 (7th Cir. 2003).

The fitness for judicial decision inquiry guards against judicial review of hypothetical or speculative disputes. Babbitt v. United Farm Workers National Union, 442 U.S. 289, 297 (1979). Legal issues that require little if any further factual development are fit for review. Wisconsin Central, Ltd. v. Shannon, 539 F.3d 751, 759 (7th Cir. 2008). Motorola argues that Apple’s counterclaims are not fit for judicial decision because the policies and commitments to the standards setting organizations upon which Apple seeks relief require Motorola to license only those patents that are *actually* essential to the respective standards at issue in the commitments. Thus, Motorola’s obligation to grant Apple a license will be triggered only if there is an agreement between the parties or a determination that Motorola’s patents are “essential” to standards that Apple is implementing in its products. In other words, Motorola must prove in the patent infringement case, or Apple must concede in this case, that Apple has infringed Motorola’s patents before Apple is entitled to a license from Motorola. Motorola reasons that because Apple denies that its products practice any of the asserted claims of the Motorola patents, Apple’s Cpt., dkt. #1, ¶ 15, n.2, any opinion by the court regarding Motorola’s licensing obligations would be an advisory one.

The problem with Motorola’s ripeness argument is that Motorola points to nothing

in Apple's complaint, the relevant intellectual property rights policies at issue or any case law to support its argument that it had no obligation to make a reasonable offer unless and until infringement or essentiality is established. According to Apple's complaint, Motorola is obligated to offer a fair, reasonable and non-discriminatory license to its declared-essential patents regardless whether the patents have been proven in court to be essential *in fact* to the standards adopted by the standards setting organizations or applied in Apple's products.

In particular, Apple alleges in its complaint that Motorola declared certain patents as essential or potentially essential and stated that it would grant fair, reasonable and non-discriminatory licenses to those patents. Apple's Cpt., dkt. #1, ¶¶ 71, 89, 99. Neither the language of the intellectual property policies at issue nor Motorola's assurances under those policies suggest that Motorola's obligation to offer licenses to its patents was contingent upon the outcome of patent litigation. This makes sense. The policies of the standards setting organizations become far less useful or effective if a company who has declared its patents as essential, thereby encouraging the organization to adopt the standard, can then refuse a fair, reasonable and non-discriminatory license until essentiality is proven, either through patent infringement litigation or otherwise.

At least two courts to consider the issue have concluded that claims based on fair, reasonable and non-discriminatory licensing obligations are not contingent upon the results of patent infringement suits regarding the same patents. In Nokia Corp. v. Qualcomm, Inc., 2006 WL 2521328, *1-2 (D. Del. Aug. 29. 2006), the court granted the plaintiff's motion

to remand a case seeking declaratory relief and specific performance of a fair, reasonable and non-discriminatory licensing obligation. The issue in the case was whether the plaintiff's suit presented a substantial question of federal patent law such that it could proceed in federal court. The court reviewed the allegations and concluded that the case presented no substantial question of federal patent law. In particular, the court concluded that it was not necessary "to determine whether the patents at issue are in fact 'essential' because Defendant has already voluntarily declared them essential. Rather, Plaintiff merely seeks an interpretation of Defendant's obligations arising after declaring certain patents essential." The court granted the motion to remand the case to state court.

Similarly in Ericsson Inc. v. Samsung Electronics Co., Ltd., 2007 WL 1202728, *2-3 (E.D. Tex. Apr. 20, 2007), the court concluded that the plaintiff's contract claim related to a dispute regarding the defendant's obligation to offer a reasonable and non-discriminatory license was separable from the claims for patent infringement. The court stayed resolution of the patent infringement claims until the breach of contract claim was resolved. Motorola has cited no cases in which the court concluded that contractual or antitrust claims related to licensing obligations cannot be resolved before resolution of related patent infringement suits.

In this case, the parties dispute whether Motorola is required by contract to make fair, reasonable and non-discriminatory offers to Apple and whether Motorola has done so. Apple's claims are not based on "hypothetical, speculative or illusory disputes," Wisconsin

Central, Ltd. v. Shannon, 539 F.3d 751, 759 (7th Cir. 2008); rather, they are based on allegations of concrete and ongoing injuries that are sufficiently imminent to warrant judicial action. Regional Rail Reorganization Act Cases, 419 U.S. at 143.

In addition, Apple may suffer hardship if the court withholds consideration of the issues presented. Hardship may be found when there may be a “substantial immediate impact” on the interests of plaintiff as a result of the challenged action. Hinrichs v. Whitburn, 975 F.2d 1329, 1335-36 (7th Cir. 1992). Apple alleges that it invested significant money and other resources into developing products that are compliant with the standards adopted by the various standards setting organizations, relying on Motorola’s commitments that it would license patents that it had declared essential to those standards on fair, reasonable and non-discriminatory terms. Apple alleges that because Motorola has refused to offer licenses on fair, reasonable and non-discriminatory terms, Apple is involved in multiple patent infringement suits, risks losing the ability to sell its products in the market and is threatened by high royalty rates. These allegations imply that Apple would suffer hardship if the court dismisses its licensing claims at this time. In sum, at this stage I cannot conclude that no present dispute exists and that Apple would not be subject to hardship if its claims were dismissed. Therefore, I will deny Motorola’s motion to dismiss Apple’s complaint for lack of ripeness.

2. Adequacy of pleading

Motorola also moves to dismiss each of Apple's counterclaims under Fed. R. Civ. P. 12(b)(6) for failure to state a claim upon which relief may be granted. A claim should be dismissed under Rule 12(b)(6) when the allegations in the complaint, however true, could not raise a plausible claim of entitlement to relief. *Ashcroft v. Iqbal*, 129 S. Ct. 1937, 1949 (2009); *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 558 (2007). In ruling on a motion to dismiss, courts must construe all of the plaintiff's factual allegations as true and draw all reasonable inferences in the plaintiff's favor. *Savory v. Lyons*, 469 F.3d 667, 670 (7th Cir. 2006). However, courts are not required to accept as true a legal conclusion presented as a factual allegation. *Iqbal*, 129 S. Ct. At 1949-50.

a. Breach of contract

Apple has asserted six separate breach of contract counterclaims, alleging that Motorola breached the contracts it made with the European Telecommunications Standards Institute, the Institute of Electrical and Electronics Engineers, the 3G Project and the Telecommunication Industry Association to license its patents on fair, reasonable and non-discriminatory terms. Motorola contends that these breach of contract claims should be dismissed because Apple has failed to plead any of the elements of a breach of contract claim adequately.

The initial question is which law applies to the alleged contracts at issue. Apple (a

California company) is suing Motorola (an Illinois company) for violation of commitments to the European Telecommunications Standards Institute (which is based in France), the Institute of Electrical and Electronics Engineers (based in New York) and the Telecommunication Industry Association (based on Virginia). Neither party undertakes a choice-of-law analysis. Although Motorola denies that the contracts are governed by Wisconsin law, it addresses only Wisconsin law. Thus, I also apply Wisconsin law. FutureSource LLC v. Reuters Ltd., 312 F.3d 281, 283 (7th Cir. 2002) (in absence of any discussion of choice of law issues by parties, court applies law of forum state).

To state a claim for breach of contract under Wisconsin law, Apple must plead (1) the existence of a contract creating obligations flowing from Motorola to Apple; (2) a breach of those obligations; and (3) damages arising from the breach. Northwest Motor Car, Inc. v. Pope, 51 Wis. 2d 292, 296, 187 N.W.2d 200, 203 (1971); Brew City Redevelopment Group, LLC v. The Ferchill Group, 2006 WI App 39, ¶ 11, 289 Wis. 2d 795, 807, 714 N.W.2d 582, 588.

According to Apple, the intellectual property rights policies of the various standards setting organizations constitute the “offers.” These policies contain requirements concerning whether and to what extent patentees owning potentially essential patents must commit to licensing such patents on fair, reasonable and non-discriminatory terms, as well as the disclosure of patents and patent applications that may be essential to standards. Motorola accepted the offers by becoming a member of the organizations, agreeing to abide by their

policies and receiving benefits by participating in the standard development process and influencing the choice of technology for the standards. The various commitments Motorola made to the organizations, including its declarations to the European Telecommunications Standards Institute and the 3G Project, its Letter of Assurance and Intellectual Property Statements to the Institute of Electrical and Electronics Engineers and its Statement from the Patent Holder to the Telecommunications Association, are consideration for those benefits. Thus, in consideration for the benefits that flowed from its membership in the standards setting organizations, Motorola provided assurances that it would timely disclose intellectual property and license essential patents on fair, reasonable and non-discriminatory terms.

Under Wisconsin law, the constitution, by-laws and resolutions of a voluntary association may form a binding contract between members of that association. Attoe v. Madison Professional Policemen's Association, 79 Wis. 2d 199, 205-6, 255 N.W.2d 489, 492 (1977). In addition, at least three courts have concluded that a member of a standards setting organization states a breach of contract claim based on a member's obligation to offer fair, reasonable and non-discriminatory licenses under the intellectual property policies of those organizations. Microsoft Corp. v. Motorola, Inc., No. 10-cv-1823-jlr, slip op. at 4-5 (W.D. Wash. May 31, 2011) (holding that Microsoft stated claim for breach of contract for Motorola's failure to offer licenses on fair, reasonable and non-discriminatory terms after promising it would do so to standards setting organization) (attached as exhibit #92-1 in this

case); Research In Motion Ltd. v. Motorola, Inc., 644 F. Supp. 2d 788, 797 (N.D. Tex. 2008) (holding at motion to dismiss stage that plaintiff stated breach of contract claim based on defendant's failure to offer fair, reasonable and non-discriminatory terms as it had promised European Telecommunications Standards Institute and Institute of Electrical and Electronics Engineers); ESS Technology, Inc. v. PC-Tel, Inc., 1999 WL 33520483, *4 (N.D. Cal. Nov. 4, 1999) (holding that third-party beneficiary of contract between standards setting organization and defendant-essential-patent holder, software manufacturer had properly stated claim for specific performance of agreement requiring defendant to license patents on non-discriminatory and reasonable terms); see also Ericsson Inc. v. Samsung Electronics, Co., 2007 WL 1202728, *1 (E.D. Tex. Apr. 20, 2007) (plaintiff and defendant asserting claims for breach of contract agreed that licensing obligations were contractual and bound all members of standards setting organizations).

However, Motorola contends that the policies at issue in this case are too vague and indefinite to support a contractual obligation. Under Wisconsin law, contract terms must be definite enough that the basic obligations of the parties may be ascertained. Goebel v. National Exchangors, Inc., 88 Wis. 2d 596, 615, 277 N.W.2d 755, 765 (1979) ("An offer must be so definite in its terms or require such definite terms in the acceptance, that the promises and performances to be rendered by each party are reasonably certain."); see also Management Computer Services v. Hawkins, Ash, Baptie & Co., 206 Wis. 2d 158, 178, 557 N.W.2d 67, 75 (1996). A court cannot specifically enforce an agreement or award damages

for its breach when it lacks certainty. Witt v. Realist, Inc., 18 Wis. 2d 282, 297, 118 N.W.2d 85, 93 (1962).

Accepting Apple’s factual allegations as true, I conclude that Apple has pleaded contractual terms definite enough to constitute enforceable agreements. The European Telecommunications Standards Institute’s intellectual property rights policy states that its members “shall use its reasonable endeavors” to inform the organization of essential patents “in a timely fashion.” Apple’s Cpt., dkt. #1, ¶ 28. In addition, all members are asked to grant licenses to essential patents on fair, reasonable and non-discriminatory terms and if they refuse, they must explain their reasons in writing. Id. ¶¶ 30, 31. The Institute will not adopt a standard incorporating patented technology to which it has not received a licensing commitment from the owner. Id. ¶ 32. According to the allegations in Apple’s complaint, Motorola agreed to be bound by these policies when it joined the organization. The combination of the policies and Motorola’s assurances to the Institute that it would grant fair, reasonable and non-discriminatory licenses to the ‘697, ‘898, ‘230 and ‘559 patents constitute a contractual agreement between Motorola and the European Telecommunications Standards Institute. In addition, because the 3G Project policy requires its members to abide by the intellectual property policies of the Institute, Motorola’s membership in the 3G Project created a contractual obligation among the Institute, Motorola and the 3G Project. Id. ¶ 33, 34.

Under the Institute of Electrical and Electronics Engineers’s policy, members are to

submit a “Letter of Assurance” to the Institute of Electrical and Electronics Engineers that includes a commitment to license essential patents under reasonable and non-discriminatory terms. Id. ¶¶ 35, 36. A contractual obligation between the Institute and Motorola was created by this policy, Motorola’s membership in the Institute and Motorola’s Letters of Assurance and Intellectual Property Statement to the Institute in which it declared the ‘223, ‘712 and ‘193 patents essential to certain standards and stated its willingness to license those patents on reasonable and non-discriminatory terms. Id. ¶¶ 85-90.

Finally, the Telecommunication Industry Association’s policy states that the standard setting process is “made more efficient” if the existence of essential patents is made known as early as possible. Id. ¶ 39. The Association policy states that companies holding any essential patents necessary for a standard adopted by the Association must assure the Association that they will (1) license those essential patents without compensation; or (2) license those essential patents “to all applicants under terms that are reasonable and non-discriminatory.” Id. ¶ 42. A contractual relationship arose between Motorola and the Association under this policy, Motorola’s membership in the Telecommunication Industry Association, its declaration that the ‘712, ‘193 and ‘697 patents are essential to certain standards and its assurance to the Association that it would license those patents under reasonable terms and conditions.

In sum, Apple’s allegations permit a reasonable inference that these policies are binding on the members of the organizations. Each policy indicates that it will not adopt

a standard, or at least will use alternative technology in the standard, if the owner of a declared-essential patent refuses to offer fair, reasonable and non-discriminatory licensing. Thus, the policies assume that members will agree to license essential patents on fair, reasonable and non-discriminatory terms and that once a member makes such a commitment, it is enforceable.

Turning to whether Apple has a right to enforce the contracts, Motorola contends that Apple is neither a party to the contracts nor an intended third-party beneficiary. Becker v. Crispell-Snyder, Inc., 2009 WI App 24, ¶ 9, 316 Wis. 2d 359, 763 N.W.2d 192 (party wishing to enforce contract must either be party to contract or third-party beneficiary). However, Apple's allegations permit an inference that it has the right to enforce Motorola's contractual obligations as a third-party beneficiary. A third-party beneficiary is one whom the contracting parties intended to "directly and primarily" benefit. Becker, 2009 WI App 24, at ¶ 11 (citing Winnebago Homes, Inc. v. Sheldon, 29 Wis. 2d 692, 699, 139 N.W.2d 606 (1966)). The benefit proven must be direct; an indirect benefit incidental to the primary contractual purpose is insufficient. Id.

Apple alleges that the primary purpose of the intellectual property policies of the standards setting organizations is to protect companies that need to obtain licences to practice the adopted standards. In other words, prospective licensees of essential patents, like Apple, are the very parties who are intended to benefit from the existence of fair, reasonable and non-discriminatory licensing obligations and other similar policies. For

example, the European Telecommunications Standards Institute policy states that it is an “objective” of the Institute to “reduce the risk” of an essential patent’s becoming “unavailable.” Apple’s Cpt., dkt. #1, at ¶ 32. The unavailability of essential patents matters only to those who wish to practice the standards, such as Apple. Thus, Apple is “a member of a class of beneficiaries intended by the [contracting] parties to benefit from [the contract].” Pappas v. Jack O.A. Nelson Agency, Inc., 81 Wis. 2d 363, 371-72, 260 N.W.2d 721 (1978).

The final question is whether Apple has pleaded sufficiently that Motorola breached the contracts. Apple contends that Motorola breached the contracts by (1) failing to timely disclose patents to the European Telecommunications Standards Institute that it later claimed were essential to certain standards; and (2) failing to license its patents to Apple on fair, reasonable and nondiscriminatory terms.

With respect to the first alleged breach, Apple alleges that Motorola was involved in developing several standards with the European Telecommunications Standards Institute and the 3G Project, was aware that it had patents or patent applications relevant to the standards, but failed to disclose the patents until after the standards were adopted. Apple alleges that if Motorola had disclosed the patents before the standards were adopted and declared the patents essential to the standards, the members of the Institute and 3G Project would have considered other viable alternative technologies or declined to incorporate the aspects of the technical specifications or standards purportedly covered by Motorola’s

patents. Now, companies who practice the standards must obtain licenses from Motorola to practice the standards. These allegations state a claim that Motorola breached its commitments to the Institute and 3G Project.

With respect to the second alleged breach, Apple alleges that Motorola has made royalty demands on Apple that exceeded those made on comparable parties for use of the declared-essential patents, discriminated against Apple by terminating Qualcomm's contract with Motorola solely as to Apple, demanded a rate that was based on the total revenue base of Apple's products rather than the revenue from the components that utilize the technologies of the declared-essential patents, sought to include cross-licenses to certain of Apple's non-essential patents as a condition of a licensing agreement and sued Apple when Apple refused to accede to Motorola's demands. At this stage of the case, these allegations are sufficient to imply that Motorola has not honored its promise to license on fair, reasonable and non-discriminatory terms. Research in Motion Ltd., 644 F. Supp. 2d at 797 (holding that plaintiff met pleading standard for breach of contract claim by alleging that defendant "demanded of [plaintiff] terms that are unfair, unreasonable, and, on information and belief, discriminatory").

Therefore, I will deny Motorola's motion to dismiss Apple's breach of contract claims.

b. Antitrust

Apple contends that Motorola violated the antitrust laws by making false licensing

commitments to standards setting organizations and by failing to disclose essential patents or applications to those organizations until after certain standards were adopted. (The parties agree that Apple’s claim under the California Business and Professional Code § 17200 is subject to the same pleading requirements as Apple’s claim under § 2 of the Sherman Act. I follow the parties’ lead and apply the pleading standards for the federal antitrust claim to both claims.)

As an initial matter, the parties dispute what pleading standards applied to Apple’s antitrust claims. At a minimum, every complaint must provide a “short and plain statement of the claim showing that the pleader is entitled to relief,” Fed. R. Civ. P. 8(a), and contain “enough facts to state a claim to relief that is plausible on its face,” Twombly, 550 U.S. at 570; see also Iqbal, 129 S. Ct. at 1949. However, Motorola contends that Apple’s antitrust counterclaim must meet the heightened pleading standards of Fed. R. Civ. P. 9(b) because the counterclaim is premised upon a course of fraudulent conduct.

The Court of Appeals for the Seventh Circuit has stated that Rule 9(b) applies whenever a claim is grounded upon alleged fraudulent conduct. Kennedy v. Venrock Associates, 348 F.3d 584, 593-94 (7th Cir. 2003); see also Borsellino v. Goldman Sachs Group, Inc., 477 F.3d 502, 507 (7th Cir. 2007) (whether Rule 9(b) applies is fact-based inquiry that depends on nature of plaintiff’s factual allegations). In this case, Apple alleges in its antitrust counterclaim that Motorola “intentionally ma[de] false and deceptive F/RAND commitments [and] failed to disclose Declared-Essential Patents in a timely

manner.” Apple’s Cpt., dkt. #1, at ¶ 165. Apple must plead these allegations of fraudulent conduct with particularity, identifying the “who, what, when, where and how” of the fraud. Pirelli Armstrong Tire Corp. Retiree Medical Benefits Trust v. Walgreen Co., 631 F.3d 436, 441-42 (7th Cir. 2011).

To plead a viable antitrust claim under § 2 of the Sherman Act, Apple must plausibly allege (1) that Motorola has achieved monopoly power in a relevant market and (2) that it achieved monopoly power through anti-competitive or exclusionary conduct “as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.” United States v. Grinnell Corp., 384 U.S. 563, 571 (1966). Motorola contends that Apple has not alleged that Motorola engaged in anticompetitive conduct and has not alleged that Motorola has achieved monopoly power in a particular market. In addition, Motorola contends that Apple’s allegations do not satisfy Rule 9(b) because Apple has failed to identify who made the allegedly false licensing commitments or failed to disclose essential patents, when the false commitments or untimely disclosures were made, the method by which the allegedly false commitments were communicated or the place the commitments were made.

Apple’s theory of antitrust liability is fairly novel and has not been considered in this circuit. However, Apple’s allegations in this case are similar to those made by the plaintiff in Broadcom Corp. v. Qualcomm, Inc., 501 F.3d 297 (3d Cir. 2007), a case involving two mobile wireless telephone companies. Broadcom filed suit against Qualcomm, alleging that

Qualcomm, a member of the European Telecommunications Standards Institute, had convinced the Institute to incorporate its technology into standards “in reliance on . . . Qualcomm’s commitment to license that technology on [fair, reasonable and non-discriminatory] terms.” Id. at 304. Broadcom argued that Qualcomm had later gone back on its word, and was “withholding favorable pricing,” in order to obtain a bigger market share. Id.

The court of appeals stated that “the [licensing] commitments that [standards setting organizations] required of vendors were intended as a bulwark against unlawful monopoly.” Id. Alternatively, the court stated, the organizations “might have chosen nonproprietary technologies for inclusion in the standard” or chosen other ways to prevent the use of standards from automatically granting monopoly power to essential patent holders. Id. The court held that “a patent holder’s intentionally false promise to license essential proprietary technology on [fair, reasonable and non-discriminatory terms], . . . coupled with a [standards setting organization’s] reliance on that promise . . . and the patent holder’s subsequent breach of that promise, is actionable anticompetitive conduct.” Id. at 314; see also Clamp-All Corp. v. Cast Iron Soil Pipe Institute, 851 F.2d 478, 488 (1st Cir. 1988) (acknowledging possibility of antitrust claim where firms both prevented standards setting organization from adopting beneficial standard and did so through “unfair, or improper practices or procedures”).

The court’s reasoning in Broadcom applies to the facts alleged by Apple in support

of its antitrust counterclaim. Apple alleges that Motorola assured the standards setting organizations that it would offer fair, reasonable and non-discriminatory licenses to all its essential patents. In addition, Apple alleges that if Motorola had disclosed to the standards setting organizations that its patents covered the standards, but that it would not offer fair, reasonable and non-discriminatory licenses to all implementers of those standards, the organizations' members may have chosen viable alternative technologies or declined to incorporate into the standards the functions purportedly covered by Motorola's patents. Apple's Cpt., dkt. #1, ¶¶ 77-78; see also Allied Tube & Conduit Corp. v. Indian Head, Inc., 486 U.S. 492, 501 (1988) (noting need for private standards setting to be free "from being biased by members with economic interests in stifling product competition"). By making false commitments that led to the establishment of worldwide standards incorporating its own patents and eliminating competing alternative technologies, Motorola has become a gatekeeper, accruing the power to harm or eliminate competition in the relevant markets if it so desires. Apple alleges that Motorola achieved its gatekeeper status not through "growth or development as a consequence of a superior product, business acumen, or historic accident," Grinnell, 384 U.S. at 570-71, but through Motorola's false promises that it would license its patents on fair, reasonable and non-discriminatory terms. The relevant markets include the various technologies competing to perform the functions covered by Motorola's declared-essential patents for each of the relevant standards. These allegations imply that Motorola engaged in anticompetitive conduct and has achieved monopoly power.

Moreover, Apple has alleged injury to itself and the relevant market. Apple alleges that it has suffered the threat of being forced to pay exorbitant royalties, the uncertainty created by Motorola's refusal to offer a fair, reasonable and non-discriminatory license, the expense of multiple patent infringement suits by Motorola and injury to Apple's business and property, specifically, the threat of imminent loss of profits, loss of current and potential customers and loss of goodwill and product image. If Motorola licenses only at exorbitant rates, it will force its competitors to increase prices in the downstream market in order to make a product. Anago, Inc. v. Tecnol Medical Products, Inc., 976 F.2d 248, 249 (5th Cir. 1992) (holding that "[t]ypical anticompetitive effects include increased prices and decreased output"). Thus, Apple's allegations permit an inference that Motorola's alleged anticompetitive conduct and refusal to grant fair, reasonable and non-discriminatory licenses may raise the costs associated with the manufacture and sale of standards compliant downstream products. Finally, Apple's allegations satisfy the heightened pleading standards of Rule 9(b) by identifying the specific patents that Motorola allegedly failed to disclose, the specific patents for which Motorola made fair, reasonable and non-discriminatory commitments, to whom the commitments were made and the dates on which they were made. Therefore I will deny Motorola's motion to dismiss Apple's counterclaims under § 2 of the Sherman Act and the California Business and Professional Code § 17200.

c. Patent misuse and waiver

Apple seeks a declaratory judgment that Motorola's patents are unenforceable as a result of patent misuse and waiver. As an initial matter, Motorola contends that Apple's patent misuse and waiver claims must be dismissed because they are not independent causes of action, but rather affirmative defenses to a charge of infringement. However, Apple points out that the Court of Appeals for the Seventh Circuit has allowed a claim of patent misuse to proceed as an independent equitable cause of action, even before a claim for infringement has been brought. County Materials Corp. v. Allan Block Corp., 502 F.3d 730, 733-34 (7th Cir. 2007); Rosenthal Collings Group, LLC v. Trading Technologies International, Inc., 2005 WL 3557947, *6 (N.D. Ill. Dec. 26, 2005) (allowing plaintiff to seek declaratory judgment of patent misuse as affirmative claim for injunctive relief). Thus, I will not dismiss Apple's patent misuse claim on that ground. However, I will dismiss Apple's waiver claim, as Apple has not cited any legal authority allowing waiver as a cause of action and I am aware of none.

To state a claim for patent misuse, Apple must allege facts showing that Motorola has employed anticompetitive practices in an effort to extend its patent grant beyond its statutory limits. USM Corp. v. SPS Technologies, Inc., 694 F.2d 505, 510 (7th Cir. 1982); see also Princo Corp. v. International Trade Commission, 616 F.3d 1318, 1328 (Fed. Cir. 2010) ("What patent misuse is about, in short, is 'patent leverage,' i.e., the use of patent power to impose overbroad conditions on the use of the patent in suit that are not within the reach of the monopoly granted by the Government.") As explained in the context of

Apple's antitrust claims above, Apple's allegations support an inference that the license Motorola seeks to impose on Apple extend beyond the reach of a lawful patent monopoly. This is sufficient to state a claim for patent misuse.

d. Promissory estoppel

To survive a motion to dismiss on a promissory estoppel claim, Apple must plead that Motorola made a promise that it should have reasonably expected to cause Apple to change its position, and that the promise caused Apple to change position in such a manner that injustice can be avoided only by enforcing the promise. Hoffman v. Red Owl Stores, Inc., 26 Wis. 2d 683, 693-94 133 N.W.2d 267, 273-74 (1965). Motorola contends that Apple's promissory estoppel claim should be dismissed as inadequately pleaded because Apple has not alleged that Motorola made any promise to Apple. I disagree.

Apple alleges that Motorola made promises to the standards setting organizations through its commitments that it would license any essential patents under fair, reasonable and non-discriminatory terms. Apple's Cpt., dkt. #1, ¶¶ 27-45; 118. Apple alleges that the intended purpose of Motorola's promises was to induce reliance and that Motorola "knew or should have reasonably expected that this promise would induce sellers of mobile wireless devices, like Apple, to develop products compliant with the relevant standards." Id. ¶ 119. Apple alleges that it "invested billions of dollars in the applicable technology and developed and marketed its products and services in reliance on Motorola's (and others') promises . .

. including designing its products and services to be compliant with adopted standards.” Id.

¶ 120. Finally, Apple alleges that it has been harmed as a result of its reasonable reliance on Motorola’s promises and is threatened by loss of profits, customers, goodwill and product image, uncertainty in business planning and uncertainty among customers and potential customers. These facts are sufficient to state a claim for promissory estoppel.

e. Tortious interference with contract

Apple contends that Motorola unlawfully interfered with Apple’s and Qualcomm’s contract when Motorola terminated its own contract with Qualcomm solely with respect to Qualcomm’s business with Apple. Motorola contends that Apple’s claim for tortious interference must be dismissed because Apple has pleaded insufficient allegations regarding the contracts at issue, the harm plaintiff suffered or whether Motorola was justified or privileged to interfere with Apple and Qualcomm’s contract. To state a claim for tortious interference, Apple must plead that (1) Apple had a current or prospective contractual relationship with a third party; (2) Motorola interfered with that relationship; (3) the interference was intentional; (4) a causal connection exists between Motorola’s interference and Apple’s damages; and (5) Motorola was not justified or privileged to interfere. Wolnak v. Cardiovascular & Thoracic Surgeons of Central Wisconsin, 2005 WI App 217, ¶ 14, 287 Wis. 2d 560, 574, 706 N.W.2d 667, 675 (citing Duct-O-Wire Co. v. United States Crane, Inc., 31 F.3d 506, 509 (7th Cir. 1994)).

Accepting Apple's allegations as true, I conclude that Apple has included sufficient facts in its complaint to state a claim for tortious interference. Apple alleges that under a December 2009 contract, it agreed to purchase chipsets from Qualcomm incorporating technology that Qualcomm licensed from Motorola. Apple's Cpt., dkt. #1, ¶ 46. In addition, Apple alleges that on January 11, 2011, the same day that Apple announced the Verizon iPhone, Motorola sent a letter to Qualcomm, identifying Apple as Qualcomm's customer and stating its intent to terminate any and all license covenant rights with respect to Apple, effective February 10, 2011. Id. ¶ 48. These allegations allow an inference that Motorola was aware of Qualcomm's contract with Apple. See also id. ¶ 195 ("Motorola knew of the [Apple-Qualcomm] contract and intended to interfere with the performance of this contract.")

Also, Apple alleges that it "made substantial investments in the research, design, manufacture, and marketing of wireless communication handsets . . . [including its] CDMA-2000-compliant version of its iPhone 4, which will utilize Qualcomm components" and that Motorola's selective termination of the Motorola-Qualcomm contract "will cause harm to Apple's business and/or property" and will "disadvantage Apple in relation to the other customers of Qualcomm who are Apple's competitors and are unaffected and can continue to receive their bargained for products." Id. ¶¶ 47, 50, 51, 196. This is sufficient to plead that Motorola's actions have harmed Apple. Duct-O-Wire Co., 31 F.3d at 509 (holding that plaintiff had shown harm by claiming deprivation of sales by competitor-defendant);

Magnum Radio, Inc. v. Brieske, 217 Wis. 2d 130, 140, 577 N.W.2d 377, 380-81 (Ct. App. 1998) (holding that plaintiff had properly stated tortious interference claim where defendant's actions made performance of underlying contract "more expensive or burdensome").

Finally, Apple's conclusory allegation that "Motorola had no basis under its agreements with Qualcomm or otherwise for this selective, partial termination," id. ¶ 49, is sufficient at this stage because the ultimate burden for demonstrating privilege is on Motorola, not Apple. Wolnak, 2005 WI App 217, ¶ 27 (citing WIS JI-CIVIL 2780); Tele-Port, Inc. v. Ameritech Mobile Communications, Inc., 49 F. Supp. 2d 1089, 1095 (E.D. Wis. 1999) (explaining that this element "may not even need to be pled by plaintiff because defendant bears the burden on that matter"). Therefore, I will deny Motorola's motion to dismiss Apple's claim for tortious interference with contract.

B. Motorola's Motion to Sever and Consolidate

Under Rule 42 of the Federal Rules of Civil Procedure, a court may bifurcate claims "for convenience, to avoid prejudice, or to expedite and economize." Fed. R. Civ. P. 42(b). In addition, courts may consolidate separate "actions involving a common question of law or fact" pending before it. Fed. R. Civ. P. 42(a). "It is within the court's broad managerial discretion to prevent 'unnecessary duplication of effort in related cases' through consolidation or other means." SanDisk Corp. v. Phison Electronics Corp., 538 F. Supp.

2d 1060, 1068 (W.D. Wis. 2008) (quoting E.E.O.C. v. G-K-G, Inc., 39 F.3d 740, 745 (7th Cir. 1994)).

Motorola contends that because all of the essential patents at issue in the ‘178 case have been asserted in the ‘661 and ‘662 infringement actions, the ‘178 case should be severed and consolidated with the ‘661 and ‘662 cases. In particular, Motorola contends that Apple’s estoppel, waiver, breach of contract, declaratory judgment, antitrust and unfair competition claims involving the ‘712, ‘230, ‘193, ‘559 and ‘898 patents should be severed from the ‘178 case and consolidated with the ‘662 case in which Motorola has asserted infringement claims regarding those five patents. In addition, Apple’s estoppel, waiver, breach of contract, declaratory judgment, antitrust and unfair competition claims involving the ‘223 and ‘697 declared-essential patents should be severed from the ‘178 case and consolidated with the ‘661 case in which Motorola has asserted infringement claims regarding those two patents. Apple’s claims involving the ‘223 and ‘697 patents would be stayed along with the rest of the ‘661 case. In fact, Motorola contends that Apple’s claims involving the ‘223 and ‘697 patents must be stayed because they are subject to the mandatory stay provision in 28 U.S.C. § 1659.

For its part, Apple contends that the case cannot be severed for several reasons and rather, should proceed on an accelerated schedule so that the claims in this case can be decided before the patent infringement claims in the ‘661 and ‘662 cases are resolved. According to Apple, resolution of its breach of contract claims will “alleviate the need for

resolution of the infringement actions related to the essential patents.” Dkt. #86. (Apple’s argument assumes that it will succeed on its breach of contract claims, resulting in a license to Motorola’s patents and mooted Motorola’s infringement claims.) Essentially, both parties want their own affirmative claims adjudicated first and believe that their proposed organization plan will allow them to achieve that.

As an initial matter, I am not persuaded that the mandatory stay provision in 28 U.S.C. § 1659 applies to Apple’s claims in this case. Under that provision, “at the request of a party to the civil action that is also a respondent in the proceeding before the [International Trade] Commission, the district court shall stay . . . proceedings in the civil action with respect to any claim that involves the same issues involved in the proceeding before the Commission” until the Commission’s determination becomes final. 28 U.S.C. § 1659(a). The provision does not apply in this case, for two reasons. First, only a party that is a respondent in the Commission may seek a stay under § 1659. Motorola is not the respondent in the Commission; Apple is. No claims related to the ‘223 and ‘697 patents or any other subject are pending against Motorola in the Commission’s ‘745 investigation.

Second, as I explained in a previous case, § 1659 was enacted to protect importers and producers from *identical* patent claims and defenses. SanDisk Corp., 538 F. Supp. 2d at 1065. This means that a stay is required only when parallel claims involving the same issues about the same patent are pending in the Commission and in the district court. In this case, Apple’s breach of contract and antitrust claims are pending only in this court; they are not

pending before the Commission. The patent infringement claims being litigated in the Commission do not involve the same issues as Apple's non-patent counterclaims asserted in this case. In addition, although Apple has asserted a defense in the Commission of unclean hands related to Motorola's licensing commitments to standards setting organizations, the elements of that defense are different from the issues that must be resolved with respect to Apple's breach of contract and antitrust counterclaims. Thus, although some of the facts relevant to Apple's unclean hands defense will overlap with the claims it is asserting in this case, the legal issues are not the same. Therefore, any decision to sever, consolidate and stay Apple's claims in this case would be based on the court's discretionary powers and Fed. R. Civ. P. 42.

Severing this case and consolidating it with the '661 and '662 cases would provide some benefits, assuming the court were willing to stay discovery and decision on Apple's non-patent counterclaims. Although those counterclaims involve a host of issues not related to Motorola's infringement claims, discovery into these issues may ultimately be unnecessary because the resolution of Motorola's patent infringement claims could completely dispose of these counterclaims. In addition, Apple's counterclaims have factual overlap with some of the defenses it has asserted in the patent infringement case, including its estoppel defenses based on Motorola's alleged failure to license its patents on fair, reasonable and non-discriminatory terms.

That being said, I am not convinced that severing this case will result in increased

efficiency overall. As an initial matter, Motorola has not explained how Apple's claims can be separated cleanly into either the '661 or '662 case. For example, Apple's claim for tortious interference seems to be unrelated to the patent infringement cases and it would make no sense to consolidate it with one of the patent infringement cases. Thus, rather than eliminate the 11-cv-178 case, severance would merely spread Apple's claims into three cases.

In addition, I concluded in the context of the ripeness discussion above that the primary factual and legal questions necessary to resolve Apple's counterclaims are distinct from those necessary to resolve the patent infringement claims. Further, the facts and legal issues relevant to the parties' disputes regarding whether Motorola has offered Apple a license on fair, reasonable and non-discriminatory terms cannot necessarily be separated on the basis of the particular patent at issue. It became clear at the preliminary injunction hearing that Motorola's license offers to Apple are not based on individual patents; rather, Motorola offers to license its essential patents as a package deal. Presumably, this package includes patents at issue in both the '661 and '662 cases. Thus, it would be difficult to determine whether Motorola has made a fair, reasonable and non-discriminatory offer to Apple with respect to the patents in the '662 case, without considering the inclusion of the patents in the '661 case as part of the offer. Similarly, Apple's antitrust allegations suggest that Motorola has obtained a monopoly in the relevant markets by its ownership of several declared-essential patents. The facts relevant to the antitrust claim will necessarily include facts regarding Motorola ownership and licensing offers related to patents in both the '661

and '662 cases. For these reasons, I will deny Motorola's motion to sever and consolidate this case.

ORDER

IT IS ORDERED that

1. Defendant Motorola Mobility, Inc.'s motion to dismiss, dkt. #33, is GRANTED with respect to plaintiff Apple Inc.'s claim of waiver and DENIED in all other respects. Plaintiff's claim of waiver is DISMISSED for failure to state a claim upon which relief may be granted.

2. Defendant's motion to sever and consolidate, dkt. #39, is DENIED.

Entered this 7th day of June, 2011.

BY THE COURT:

/s/

BARBARA B. CRABB

District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

APPLE, INC.,

Plaintiff,

v.

MOTOROLA MOBILITY, INC.,

Defendant.

OPINION and ORDER

11-cv-178-bbc

This case originated in the International Trade Commission, where defendant Motorola Mobility, Inc. filed an infringement action against plaintiff Apple, Inc., seeking an exclusion order that would have prevented Apple from selling its allegedly infringing products in the United States. After the case had been pending for a few months in the Commission, Apple filed several counterclaims against Motorola and removed the counterclaims to this court under 19 U.S.C. § 1337(c). In its counterclaims, Apple alleges that Motorola has engaged in a pattern of unfair, deceptive and anticompetitive conduct by failing to timely disclose ownership of patents that it now declares are essential to technological standards adopted by the industry and by failing to offer Apple licenses to those patents on fair, reasonable and nondiscriminatory terms.

Now before the court are the parties' cross motions for summary judgment. Motorola has moved for summary judgment on all of Apple's claims on a variety of grounds. Dkt.

#150. Motorola contends that Apple's claims are barred by the doctrine of claim preclusion because Apple could have pursued them as defenses in the International Trade Commission. Motorola also contends that Apple's antitrust claims are barred by the applicable statute of limitations and by the Noerr-Pennington doctrine, which provides immunity from antitrust claims that are filed in response to nonfrivolous lawsuits. Finally, Motorola contends that Apple cannot prove the necessary elements of its tortious interference claim or its claims of unfair competition under California law and cannot prove that it suffered any damages compensable as contractual damages.

Apple has moved for partial summary judgment on specific issues relevant to its claims. Dkt. #143. In particular, Apple seeks determinations from the court that (1) Motorola's commitments to standards-setting organizations are contractually binding; (2) Apple has the right to enforce those contracts as a third-party beneficiary; (3) Motorola was required under the policies of the European Telecommunications Standards Institute (ETSI) to disclose its patents and patent applications before ETSI adopted technical standards incorporating technology covered by the patents or applications; and (4) Motorola did not disclose certain patents or applications until after ETSI adopted the standards incorporating technology from those patents.

After reviewing the parties' arguments and the facts in the record, I conclude that Motorola's motion must be granted in part and denied in part, and Apple's motion must be granted in full. With respect to Motorola's motion, I conclude that Apple's claims are not barred by the doctrine of claim preclusion, but that the Noerr-Pennington doctrine provides

Motorola immunity from Apple's antitrust and unfair competition claims premised on Motorola's patent infringement litigation and from Apple's claims for declaratory judgment, to the extent that those claims are premised on a theory of antitrust or unfair competition. Because I conclude that Noerr-Pennington immunity applies, I need not consider Motorola's statute of limitations argument.

Additionally, I conclude that Motorola is entitled to summary judgment on Apple's claim that Motorola tortiously interfered with its contract with Qualcomm, as well as Apple's claim under Cal. Bus. & Prof. Code § 17200 based on the same theory, because Apple has failed to adduce any evidence showing that it suffered damages from Motorola's actions.

However, I conclude that Motorola has failed to show that Apple's breach of contract or estoppel claims should be dismissed for Apple's failure to prove that it suffered any compensable damages. Therefore, I will deny Motorola's motion as to that issue.

With respect to Apple's motion, I conclude that Motorola has failed to show that there is any genuine dispute of material fact regarding the existence of contracts between Motorola and standards-setting organizations; Apple's status as a third-party beneficiary of those contracts; Motorola's obligations to disclose its intellectual property rights in a timely manner; and Motorola's failure to disclose its patents and applications before the adoption of standards incorporating its patents. Therefore, I am granting Apple's motion for summary judgment in full.

From the parties' proposed findings of fact and the record, I find the following facts to be material and undisputed.

UNDISPUTED FACTS

A. Wireless Communication Industry

Plaintiff Apple, Inc. and defendant Motorola Mobility, Inc. are competitors in the wireless communication industry. Motorola has been a player in the industry for longer than Apple and, since at least 1990, has been a member of numerous international standards-setting organizations devoted to the development of telecommunications and wireless standards. Through the standards-setting organizations, companies agree on common technological standards so that all compliant products will work together. Standards lower costs by increasing product manufacturing volume and increase price competition by eliminating the costs for consumers to switch between products manufactured by different firms.

Some technological standards incorporate patented technology. If a patent claims technology selected by a standards-setting organization, the patent is called an “essential patent.” Many standards-setting organizations have adopted rules related to the disclosure and licensing of essential patents. The policies often require or encourage members of the organization to identify patents that are essential to a proposed standard and to agree to license their essential patents on fair, reasonable and nondiscriminatory terms to anyone who requests a license. (These terms are often referred to by the acronyms FRAND or RAND.) Such rules help to insure that standards do not allow the owners of essential patents to abuse their market power to extort competitors or prevent them from entering the marketplace.

Two standards-setting organizations are relevant to the motions before the court: The European Telecommunications Standards Institute, known as ETSI; and the Institute of Electrical and Electronics Engineers, known as IEEE. At all relevant times, Motorola has been a member of these standards-setting organizations and has participated in developing technological standards for the wireless communication industry. Both organizations have intellectual property rights policies that address disclosure and licensing of patents that are essential to standards being considered or being adopted by the organizations. Additionally, Motorola has participated in the 3rd Generation Partnership Project, known as the 3G Project, which requires its members to abide by the intellectual property rights policies of ETSI and other standards-setting organizations.

1. European Telecommunications Standards Institute (ETSI)

ETSI is a standards-setting organization located in France that creates technological standards for the telecommunications industry. It has an intellectual property rights policy set forth in Annex 6 of its Rules of Procedure to govern the disclosure of intellectual property rights that are essential to standards being considered by ETSI. Dkt. #148-22. The policy defines “intellectual property right” as “any intellectual property right conferred by statute law including applications therefor. . . [but not] rights relating to . . . confidential information, trade secrets or the like.” Id. § 15- 7. Since 1997, ETSI's policy has required members to disclose intellectual property that may be essential to standards. With minor variations, it has stated:

[E]ach MEMBER shall use its reasonable endeavours, in particular during the

development of a STANDARD or TECHNICAL SPECIFICATION where it participates, to inform ETSI of ESSENTIAL [intellectual property rights] in a timely fashion. In particular, a MEMBER submitting a technical proposal for a STANDARD or TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's [intellectual property rights] which might be ESSENTIAL if that proposal is adopted.

Id. § 4.1. The policy does not define “reasonable endeavours” or “bona fide basis.”

However, it is generally understood that members of ETSI should disclose intellectual property rights that they know are relevant to potential standards while the standard is being discussed and before the standard is adopted. Generally, the engineers working on the standards in working groups or technical meetings do not formally disclose intellectual property rights at those meetings. Whinnett Dep., dkt. #142, at 101; Brown Dep., dkt. #136 at 291; Smolinske Dep., dkt. #140, at 72-73. Rather, the owner of the intellectual property right files a formal disclosure with ETSI.

ETSI's intellectual property rights policy also addresses the availability of licenses to essential intellectual property rights. The policy requires the Director-General of ETSI to ask owners of essential patents to agree to “grant irrevocable licences on fair, reasonable and non-discriminatory terms and conditions.” Id. § 6.1. Under ETSI's “Guide on Intellectual Property Rights,” the owner of the intellectual property right should notify ETSI of its willingness to license by submitting an information and licensing declaration that identifies specific patents or pending applications that may be essential. Guide, dkt. #149-23, § 2.1.2. An owner may also use a general licensing declaration to notify ETSI that it is willing to grant licenses for any of its intellectual property rights that become essential to a standard. However, use of the general licensing declaration “does not take away the obligation for

members to declare essential patents to ETSI.” Id. Owners are not required to disclose any specific licensing terms and ETSI’s policies provide that “[s]pecific licensing terms and negotiations are commercial issues between the companies and shall not be addressed within ETSI.” Id. § 4.1.

If a patent owner tells ETSI that it is not prepared to license one of its patents that is relevant to a standard, ETSI’s General Assembly reviews the requirements for that standard to determine whether “a viable alternative technology is available for the standard or technical specification” that is “not blocked by that [patent].” Dkt. #148-22, § 8.1.1. If the General Assembly concludes that no such viable alternative technology exists, ETSI “shall cease” work on the standard. Id. § 8.1.2. If the owner who is refusing to grant a licensee is a member of ETSI, the Director-General of ETSI asks the member to reconsider its position or provide a written explanation of its reasons for refusing to license its patents. Id. The Director-General forwards the written explanation to “ETSI Counselors for their consideration.” Id.

The objective of ETSI’s intellectual property rights policy is to

reduce the risk to ETSI, MEMBERS, and others applying ETSI STANDARDS and TECHNICAL SPECIFICATIONS, that investment in the preparation, adoption and application of STANDARDS could be wasted as a result of an ESSENTIAL [intellectual property right] for a STANDARD or TECHNICAL SPECIFICATION being unavailable. In achieving this objective, the ETSI [intellectual property rights policy] seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of [intellectual property rights].

Id. § 3.1. The policy goes on to state that ETSI “shall take reasonable measures to ensure, as far as possible,” that standards and technical specifications will “be available to potential

users.” Id. § 3.3.

ETSI’s bylaws provide that any violation of the policy by an ETSI member “shall be deemed to be a breach, by that MEMBER, of its obligations to ETSI. The ETSI General Assembly shall have the authority to decide the action to be taken, if any, against the MEMBER in breach, in accordance with ETSI Statutes.” Id. § 14.

2. The Institute of Electrical and Electronics Engineers (IEEE)

IEEE is a standards-setting organization responsible for the standardization of wireless information exchange among systems and networks. IEEE’s bylaws in place from December 1993 through December 1995 provided that “IEEE standards may include patented technology if there is no equivalent noninfringing way of achieving the objectives of the standard, if it is justified for technical reasons, and if the patent holder agrees to nondiscriminatory licensing at reasonable rates.” Dkt. #148-23, § 5.

Between 1996 and 2005, IEEE requested owners of intellectual property rights that are essential to declared standards to submit a letter of assurance that was either a general disclaimer of their right to enforce patent claims against anyone practicing the standards or an agreement to license patent rights “without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination.” Dkt. #148-26, § 6.

The policies that were approved in February 2011 state that “[n]o license is implied by the submission of a Letter of Assurance,” dkt. #7-12, § 6.2, and that IEEE is “not

responsible for identifying Essential Patent Claims for which a license may be required, for conducting inquiries into the legal validity or scope of those Patent Claims, or for determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance, if any, or in any licensing agreements are reasonable or non-discriminatory.” Id.

B. Motorola’s Disclosure of Essential Patents and Commitments to License

Motorola has declared that its United States Patent Nos. 5,636,223 (the ‘223 patent), 5,311,516 (the ‘516 patent), 5,572,193 (the ‘193 patent), and the 5,319,712 (the ‘712 patent) are essential to the practice of the 802.11 wireless communication standard adopted by IEEE. In 1994, Motorola submitted a declaration to IEEE, stating that Motorola agreed to license any patents essential to the 802.11 standard “on a non-discriminatory basis offering fair and commercially reasonable terms.” Dkt. #148-28.

In 2002, Motorola submitted declarations to ETSI and the 3G Project that its 6,175,559 (the ‘559 patent), 6,246,697 (the ‘697 patent) and 6,359,898 patents (the ‘898 patent) are essential or potentially essential to standards adopted by ETSI and the 3G Project. As to the ‘559 and ‘697 patents, Motorola declared in a December 20, 2002 letter to ETSI that it “is prepared to grant irrevocable licenses on fair, reasonable and nondiscriminatory terms and conditions under such [patents], to the extent that the [patents] remain essential.” Dkt. #148-6. As to the ‘898 patent, Motorola declared to ETSI in 2003 that it was “prepared to grant irrevocable licenses under the [patents] on terms and

conditions which are in accordance with Clause 6.1 of the ETSI [intellectual property rights] Policy, in respect of the STANDARD, to the extent that the [patents] remain ESSENTIAL.”

Dkt. #148-3.

C. Timeliness of Motorola’s Disclosures

1. ‘697 patent

Motorola filed the application that led to the ‘697 patent on January 24, 1998. In March 1998, Motorola submitted a proposal using the ‘697 patent’s technology to SMG2, the working group developing a portion of the 3GPP standard for the 3G Project. One of the inventors of the ‘697 patent, Motorola employee Nicolas Whinnett, participated in SMG2 meetings at that time. Motorola did not disclose the ‘697 patent or application to ETSI, a partner in the 3G Project, or to the SMG2 working group.

In July 1999, the ‘697 patent inventors wrote an article discussing the technology of the ‘697 patent. They filed applications for foreign counterparts of the ‘697 patent that were published on July 29, 1999 and November 22, 2000.

The 3GPP standard, including technology covered by the ‘697 patent, was adopted by the 3G Project in December 1999. The ‘697 patent issued on June 12, 2001. Motorola disclosed the ‘697 patent to ETSI on September 20, 2002.

2. ‘559 patent

Motorola filed the application that led to the ‘559 patent on July 7, 1999. On July

13-16, 1999 at an ETSI meeting in Finland, Tyler Brown, a representative of Motorola and the sole inventor of the '559 patent, proposed including technology covered by the '599 patent in a portion of ETSI's Universal Mobile Telecommunications System standard (known as the UMTS standard). Motorola did not disclose the '559 application. In March 2000, the relevant section of the standard was finalized and adopted. The '559 patent issued on January 16, 2001. Motorola disclosed the '559 patent as essential to the standard in September 2002.

3. '898 patent

Motorola filed a provisional, unpublished application that led to the '898 patent on September 2, 1997. At a meeting in Sophia Antipolis, France, in November 1997, Motorola submitted "Contribution A330" to the ETSI working group developing a portion of the GPRS Technical Specification. Motorola's Contribution A330 was created, in part, by two inventors of the '898 patent and it disclosed in nearly verbatim form the same technology that was described in a portion of the specification of the September 1997 patent application. On March 11, 1999, Motorola's application that resulted in the '898 patent was published when Motorola applied for foreign counterparts to the application. In April 2001, ETSI published the portion of the GPRS standard that incorporated the ideas from Motorola's Contribution A330.

The '898 patent issued on March 19, 2002. Motorola disclosed the '898 patent to ETSI on April 8, 2003.

D. Negotiations for Licensing between Apple and Motorola

In 2005, Apple began developing the iPhone. No later than mid-2006, Apple became aware that Motorola had declared patents essential to cellular standards. Apple released its iPhone in 2007 without seeking a patent license from Motorola.

In August 2007, Motorola offered Apple a license to its essential patents. At the initial meeting between the companies, Motorola presented information to Apple concerning its licensing program and stated that its standard royalty rate was 2.25% for a worldwide license to its portfolio of standards-essential patents. Apple rejected the 2.25% rate. Motorola continued to engage in license negotiations with Apple for approximately three years, but Apple refused to accept a license on any terms offered by Motorola.

E. Motorola's Termination of the Qualcomm License

Apple entered into a "Strategic Terms Agreement" with Qualcomm on December 16, 2009. Dkt. #153-40. The agreement set terms on which "certain Apple authorized purchasers may purchase certain components from time to time from" a Qualcomm affiliate "for use and incorporation in Apple products." *Id.* at 1. Among these components are chipsets that allow mobile devices to communicate via cellular networks, including the baseband processor incorporated into the iPhone 4S. The chipsets incorporated technology that Qualcomm had licensed from Motorola since 1990. The Strategic Terms Agreement did not require Apple or any of its affiliates to actually purchase chipsets and also did not guarantee that the chipsets or any other components supplied by Qualcomm would be

licensed under Motorola's or any other patent holder's patents.

On January 11, 2011, the day Apple announced the Verizon iPhone 4, Motorola sent a letter to Qualcomm, with a copy to Apple, stating that Motorola was terminating any and all license and covenant rights with respect to Qualcomm's business with Apple, effective February 10, 2011.

PROCEDURAL HISTORY

A. Related Cases

This particular dispute is related to three other proceedings. First, there is the investigation pending in the International Trade Commission that defendant Motorola initiated on October 6, 2010. In the Matter of Certain Wireless Communication Devices, Portable Music and Data Processing Devices, Computers and Components Thereof, ITC Investigation No. 337-TA-745. In that case, Motorola sought an exclusion order and a permanent cease and desist order as a result of plaintiff Apple's alleged infringement of several of Motorola's United States patents, including the '697 and '223 patents.

As part of its original defenses in the International Trade Commission action, Apple argued that Motorola should be barred from enforcing its patents because it had unclean hands and had failed to offer licenses on fair, reasonable and nondiscriminatory terms. In July 20, 2011, Apple notified the commission that it would "not be pursuing as part of the 745 investigation any affirmative defenses based on Motorola's failure to make a [fair reasonable and nondiscriminatory] Offer," but that it was "specifically reserv[ing] the right

... to pursue any of these defenses ... and claims related to them in other actions, including for example, the 661, 662, and 178 actions pending in Wisconsin.” Dkt. #153-35.

On April 24, 2012, the administrative law judge issued a preliminary ruling in the International Trade Commission action, finding Motorola’s ‘697 patent valid and infringed by Apple. Dkt. #153-34. (Before this determination, Motorola abandoned its infringement claims as to some of its patents.) The administrative law judge rejected Apple’s unclean hands defense, noting that Apple had no “proof that any act of Motorola actually caused any harm (to anyone).” Id. at 151.

Second (and third), the parties are litigating their disputes in two other patent infringement cases filed in this court. Plaintiff Apple filed case number 10-cv-661-bbc on October 29, 2010, asserting patent infringement claims against Motorola. On November 9, 2010, Motorola filed counterclaims in the ‘661 action alleging infringement of the same patents at issue in the International Trade Commission’s 337-TA-745 investigation. On December 2, 2010, this court granted the parties’ joint motion to stay the ‘661 case in favor of the proceedings in the commission. The case remains stayed.

Also on October 29, 2010, plaintiff Apple filed case number 10-cv-662-bbc in this court, asserting patent infringement claims against Motorola. On November 9, 2010, Motorola filed counterclaims against Apple for infringement of several of its United States patents, including the ‘516, ‘712, ‘230, ‘193, ‘559 and ‘898 patents, all of which Motorola has declared essential to certain standards adopted in the wireless communications industry. The 10-cv-662 case was transferred to the Northern District of Illinois in December 2011.,

where the case was dismissed with prejudice on June 22, 2012. The court found that Motorola's patents were either invalid, not infringed by Apple or that Motorola could not prove the amount of damages to which it was entitled. Apple, Inc. v. Motorola, Inc., 2012 WL 2376664 (N.D. Ill. June 22, 2012).

B. The Case at Issue (11-cv-178-bbc)

Shortly after Apple removed this case to federal court, it moved for preliminary injunctive relief, seeking an order that would have enjoined Motorola from (1) proceeding as a party in the 337-TA-745 investigation in the International Trade Commission with respect to the '223 and '697 patents; (2) proceeding with its counterclaims filed in case number 10-cv-662-bbc in this court with respect to the '712, '230, '193, '559 and '898 patents; and (3) selectively terminating its patent license agreement with Qualcomm as to Apple. A hearing was held on the motion on April 26, 2011. At the conclusion of the hearing, I denied Apple's motion for a preliminary injunction.

Motorola filed a motion to dismiss Apple's claims, which I granted only with respect to Apple's claim of waiver. Apple has the following 10 claims remaining in the case:

- Equitable estoppel (Count 1)
- Breach of contract with ETSI/3GPP (Count 2)
- Breach of contract with ETSI/3GPP to which Apple is a third party beneficiary (Count 3)
- Breach of contract with IEEE to which Apple is a third party beneficiary (Count 4)
- False commitments to license on fair, reasonable and nondiscriminatory terms and

deceptive acts in violation of § 2 of the Sherman Act (Count 5)

- Unfair competition and unlawful business practices in violation of Cal. Bus. & Prof. Code § 17200 (Count 6)
- Declaratory judgment that Motorola's offers have not been on fair, reasonable and nondiscriminatory terms (Count 7)
- Declaratory judgment on no entitlement to injunctive relief (Count 11)
- Declaratory judgment of patent misuse (Count 12)
- Interference with contract (Count 13)

Apple's Am. Cpt., dkt. #110.

OPINION

A. Motorola's Motion for Summary Judgment

1. Claim preclusion

Motorola contends that all of Apple's claims are barred by the doctrine of "res judicata" because Apple could have raised them in the International Trade Commission as defenses to Motorola's infringement claims, or did raise them there and they were rejected. Specifically, in the International Trade Commission action, Apple abandoned its argument that Motorola's patents were unenforceable because Motorola refused to license its patents on reasonable and nondiscriminatory terms. Apple did argue that Motorola's '697 patent was unenforceable under the doctrine of "unclean hands," but the administrative law judge rejected the argument and found that the '697 patent was valid and had been infringed by Apple.

Res judicata is the traditional term for the doctrine of claim preclusion, but is sometimes used generally to refer to both claim and issue preclusion. Hayes v. City of Chicago, 670 F.3d 810, 814 n.1 (7th Cir. 2012). Motorola does not identify whether it is intending to invoke claim or issue preclusion, but the majority of cases it cites concern claim preclusion. Thus, I am assuming that Motorola is arguing for the application of claim preclusion.

Claim preclusion “prohibits litigants from relitigating claims that were or could have been litigated during an earlier proceeding.” Id. at 813. The case on which Motorola relies primarily is Martino v. McDonald’s System, Inc., 598 F.2d 1079 (7th Cir. 1979), in which the court of appeals held that the plaintiff was barred from bringing an antitrust claim that would have undermined a previous consent judgment issued by a federal district court against the plaintiff. Id. at 1083. The court explained that “res judicata . . . treats a judgment on the merits as an absolute bar to relitigation between the parties . . . of every matter offered and received to sustain or defeat the claim or demand and to every matter which might have been received for that purpose.” Id.

This case is distinguishable from Martino and the other cases cited by Motorola. In Martino, the plaintiff was attempting to attack a judgment issued by a federal court; in this case, Apple is asserting counterclaims that have the potential to undermine the International Trade Commission’s decision regarding Apple’s infringement of Motorola’s patents. It is well established law that decisions of the International Trade Commission on issues of patent validity and enforceability are not entitled to preclusive effect. E.g., Powertech

Technology Inc. v. Tessera, Inc., 660 F.3d 1301, 1308 (Fed. Cir. 2011) (“resolution of the ITC action will not have preclusive effect” on district court action); Bio-Technology General Corp. v. Genentech, Inc., 80 F.3d 1553, 1564 (Fed. Cir. 1996); Texas Instruments Inc. v. Cypress Semiconductor Corp., 90 F.3d 1558, 1569 (Fed. Cir. 1996); Texas Instruments Inc. v. International Trade Commission, 851 F.2d 342, 344 (Fed. Cir. 1988).

Motorola argues that the general rule against granting preclusive effect to International Trade Commission determinations does not apply here because there is no rule barring a district court from giving preclusive effect to the commission’s decisions on “non-patent” issues, such as Apple’s antitrust, estoppel and contract claims. Motorola cites three cases that it believes support its position. In the first two cases, Aunyx Corp. v. Canon U.S.A., Inc., 978 F.2d 3, 7 (1st Cir. 1992) and Baltimore Luggage Co. v. Samsonite Corp., 1992 WL 296368, *4 (4th Cir. 1992), the courts held that it was appropriate to give preclusive effect to commission decisions concerning antitrust and unfair competition. However, neither of those cases is particularly useful because neither involved decisions from the commission arising out of patent disputes.

The third case cited by Motorola, Teletronics Proprietary, Ltd. v. Medtronic, Inc., 687 F. Supp. 832 (S.D.N.Y. 1988), is more helpful to its position. In Teletronics, the district court concluded that it was appropriate to apply issue preclusion to the commission’s determination regarding a license defense to a patent dispute. The court distinguished between different types of defenses to patent infringement, stating that “[u]nlike invalidity and unenforeability, noninfringement is not a defense based on the validity of a patent.

Rather, it is a defense based on a contractual right to use the patent, or on defendant's lack of use of the patent." Id. at 846, n.40. The court concluded that "the ITC's determination as regards the existence of a license under a patent . . . was not one of the validity of a patent but of the existence of a contract" and should be "accorded preclusive effect." Id. at 845-46.

However, unlike the district court in Teletronics, the Court of Appeals for the Federal Circuit has not distinguished between types of defenses to patent infringement when discussing the preclusive effect of International Trade Commission decisions. As the court of appeals explained in Texas Instruments, 90 F.3d at 1569, "once we accept . . . that ITC decisions are not binding on district courts in subsequent cases brought before them, it necessarily follows that accused infringers can raise *whatever defenses they believe are justified*, regardless whether they previously raised them and lost in the ITC." (Emphasis added). See also Epistar Corp. v. Philips Lumileds Lighting Co., 2008 WL 3930030, *2-4 (N.D. Cal. Aug. 26, 2008) (patent defendant not precluded from raising defenses of license and covenant not to sue in district court patent infringement action even though it had waived those defenses in International Trade Commission).

In Texas Instruments, the court of appeals recognized that any defense an alleged infringer raises is properly treated as a "patent issue" for purposes of determining whether preclusion principles should apply. In this case, it is clear from Motorola's arguments that it is seeking to give preclusive effect to the International Trade Commission's decision on "patent issues." By seeking to bar Apple from presenting any claim that would undermine the commission's determination of validity and infringement, in effect, Motorola is asking

the court to give preclusive affect to the commission's conclusions regarding the enforceability of Motorola's patents. Motorola admits as much in its brief, stating that the defenses that Apple abandoned in the commission challenged whether "the patents are unenforceable." Motorola's Br., dkt. #151, at 5.

Motorola attempts to avoid the rule of Texas Instruments by arguing that the rule against giving preclusive affect to commission decisions applies only when an alleged patent infringer is facing parallel infringement claims before the commission and district court. Motorola contends that this case is different because Apple has not challenged Motorola's patent disclosures and licensing offers as defenses to an infringement claim, but as affirmative claims that constitute a direct attack on the commission's decisions. However, Motorola cites no cases suggesting that a commission decision should be given preclusive effect in some types of district court cases and not others.

Moreover, Motorola's claim preclusion argument fails for another reason. The claims Apple is pursuing in this case originated as "counterclaims" in the International Trade Commission that were subject to mandatory removal. 19 U.S.C. § 1337(c); 19 C.F.R. § 210.14(e). Thus, the commission never had jurisdiction to hear Apple's counterclaims or to grant the type of relief that Apple is seeking in this case. The doctrine of claim preclusion does not bar a party from asserting claims that could not have been raised in a previous proceeding. Carver v. Nall, 172 F.3d 513, 516 (7th Cir. 1999) ("Claim preclusion does not operate so harshly as to bar whichever set of claims the chosen forum could not hear."). See also Bio-Technology, 80 F.3d at 1563 ("[T]he bar against later claims based on the same

transactional facts is ‘subject to certain limitations, one of which is that it will not be applied if the initial forum did not have the power to award the full measure of relief sought in the later litigation.’”) (citation omitted). Accordingly, Motorola is not entitled to summary judgment on the basis of claim preclusion.

2. Noerr-Pennington doctrine

Next, Motorola contends that all of Apple’s claims are barred by the First Amendment under the Noerr-Pennington doctrine. The First Amendment protects “the right of the people . . . to petition the Government for a redress of grievances.” U.S. Const. amend. I. Under the Noerr-Pennington doctrine, a party that exercises its First Amendment right to petition the government for redress generally is immune from antitrust liability premised on the petition. Eastern Railroad Presidents Conference v. Noerr Motor Freight, Inc., 365 U.S. 127, 136 (1961); United Mine Workers of America v. Pennington, 381 U.S. 657, 670 (1965)). This includes a party who brings a legitimate dispute to the courts for judicial resolution. Professional Real Estate Investors, Inc. v. Columbia Pictures Industries, Inc., 508 U.S. 49, 56 (1993); California Motor Transportation Co. v. Trucking Unlimited, 404 U.S. 508, 510 (1972). However, petitioning conduct is not immune if it is a “mere sham to cover what is actually nothing more than an attempt to interfere directly with the business relationship of a competitor.” Noerr, 365 U.S. at 144. Motorola contends that Apple’s claims in this case are based solely on Motorola’s patent litigation in the International Trade Commission and district court, and that because its patent litigation is protected petitioning

activity, Motorola is immune from liability on Apple's claims.

Apple does not deny that initiating and prosecuting a patent infringement action is the type of petitioning activity protected by the Noerr-Pennington doctrine, and several courts have reached the same conclusion. See, e.g., ERBE Elektromedizin GmbH v. Canady Technology LLC, 629 F.3d 1278, 1292 (Fed. Cir. 2010); Monolithic Power Systems, Inc. v. O2 Micro International Ltd., 2007 WL 801886, *6 (N.D. Cal. Mar. 14, 2007); Hyniz Semiconductor Inc. v. Rambus, Inc., 2006 WL 1883353, *1-2 (N.D. Cal. July 7, 2006); In re Relafen Antitrust Litigation, 360 F. Supp. 2d 166, 177-78 (D. Mass. 2005). However, Apple contends that the immunity does not apply to any of its claims because they are not based on Motorola's petitioning activity.

a. Apple's antitrust claim

Apple contends that its claim under § 2 of the Sherman Act arises out of Motorola's "abuse of the standard-setting process" and "Motorola's deceptive conduct and failure to offer a [fair, reasonable and nondiscriminatory] license." Apple's Br., dkt. #167, at 6. In support of its argument, Apple cites ERBE Elektromedizin, 629 F.3d at 1292, in which the Court of Appeals for the Federal Circuit explained that a party's assertion of non-sham claims for "patent infringement, trademark, and trade dress" was protected by Noerr-Pennington from antitrust liability, but that other conduct, including "interfering with and inhibiting the development and marketing of [disputed products], and interfering with . . . contracts and business expectations," could be a basis for antitrust liability. Id. at 1292-93.

See also Hynix Semiconductor, 2006 WL 1883353, at *2 (holding that Noerr-Pennington immunity applies only to protected litigation-related activities, but would not immunize defendant from antitrust claims premised on broader unlawful course of anticompetitive conduct).

The problem for Apple is that its allegations and arguments make clear that its antitrust claim is necessarily based on Motorola's patent litigation. In its brief, Apple contends that its antitrust claim arose sometime in 2007, when Motorola offered it a license with exorbitant royalty rates. Apple's Br., dkt. #167, at 13 (Apple's injury "could not have arisen until, at the very earliest, Motorola made its first royalty demand in September 2007"). However, Apple has presented no evidence that it suffered any antitrust injury as a result of Motorola's license demand. It is well established law that a party can sustain an antitrust claim only if it has suffered an antitrust injury. In re Copper Antitrust Litigation, 436 F.3d 782, 789 (7th Cir. 2006) ("[A]n antitrust cause of action accrues and the statute begins to run when a defendant commits an act that injures a plaintiff's business.") (citation omitted); Warren General Hospital v. Amgen Inc., 643 F.3d 77, 92 (3d Cir. 2011) ("It is a basic tenet of antitrust law that a cause of action will not lie if the plaintiff has not been harmed.").

In this case, it is undisputed that Apple refused to pay the 2.25% royalty rate that Motorola demanded and continued to manufacture and market its products despite Motorola's demands. Apple has produced no evidence or argument suggesting that Motorola's licensing demand caused Apple to change its product, delay the release of the

iPhone, suffer from increased costs or lose any customers or market share. Instead, the only injury Apple suffered as a result of Motorola's alleged antitrust violation was the attorney fees and costs that it has incurred responding to the patent litigation initiated by Motorola. Apple's damages expert identifies no other damages except litigation fees and expenses. Thus, Apple's antitrust claim is premised on Motorola's attempt to enforce its patents. Because Motorola's enforcement of its patents is privileged conduct protected by the First Amendment, the Noerr-Pennington doctrine applies. Columbia Pictures Industries, Inc. v. Professional Real Estate Investors, Inc., 944 F.2d 1525, 1529 (9th Cir. 1991) (holding that defendant was immune from antitrust liability under Noerr-Pennington because all of plaintiff's claimed antitrust injuries were caused by defendant's enforcement of copyrights, not by defendant's refusal to license its copyrighted work).

Apple devotes one paragraph in its brief to the argument that Motorola may not be entitled to Noerr-Pennington immunity because its patent infringement claims may fall under the "sham" exception to the doctrine. Apple's Br., dkt. #167, at 9. As the party asserting the sham exception, Apple has the burden of showing that it should apply. IGEN International, Inc. v. Roche Diagnostics GmbH, 335 F.3d 303, 312 (4th Cir. 2003); USS-POSCO Industries v. Contra Costa County Building & Construction Trades Council, AFL-CIO, 31 F.3d 800, 811 (9th Cir. 1994). A petition or lawsuit may be considered a "sham" if it is (1) "objectively baseless"; and (2) subjectively motivated by a desire to impose anticompetitive harm from the judicial process rather than obtain judicial relief. Professional Real Estate Investors, 508 U.S. at 61, 65. Apple makes no real attempt to satisfy either

prong, stating only that Motorola has dropped two of its patent infringement claims and three others were found to be invalid or not infringed. However, the fact that some or even all of Motorola's patent infringement claims were unsuccessful is not sufficient on its own to show that Motorola's claims are "objectively baseless," particularly in light of the preliminary finding of the International Trade Commission that Apple infringed one of Motorola's patents. Simply stating, without factual support, that Motorola's patent litigation may be a sham is not sufficient to raise a genuine issue of material fact regarding the sham exception. Accordingly, I find that Motorola is immune from Apple's antitrust claim.

b. Apple's claims under Cal. Bus. & Prof. Code § 17200

Apple has two theories to support its claim of unfair competition and unlawful business practices in violation of Cal. Bus. & Prof. Code § 17200 (count 6). First, Apple contends that Motorola engaged in unlawful business practices when it interfered with Motorola's contract with Qualcomm. The Noerr-Pennington doctrine is not applicable to that theory because Motorola's actions toward Qualcomm are separate and distinct from Motorola's protected activity of patent litigation. However, Apple's second theory of liability in count 6 is premised on the same allegations as its antitrust claim under § 2 of the Sherman Act. In particular, Apple contends that Motorola engaged in unfair competition when it promised standards-setting organizations that it would disclose essential patents and license those patents on reasonable and nondiscriminatory terms, and later failed to disclose

the patents in a timely manner, refused to offer Apple a reasonable and nondiscriminatory license and sued Apple for patent infringement.

As with Apple's antitrust claim, a violation of Cal. Bus. & Prof. Code § 17200, requires showing that the unfair practice caused the plaintiff an economic injury. Kwikset Corp. v. Superior Ct., 246 P.3d 877, 884-85 (holding that party asserting unfair competition or unlawful business practices claim must "establish a loss or deprivation of money or property sufficient to qualify as injury in fact, i.e., economic injury . . . and show that that economic injury was the result of, i.e., caused by, the unfair business practice . . . that is the gravamen of the claim"). The only economic injury Apple suffered is the cost of defending itself from Motorola's infringement claims. Thus, Motorola is immune from Apple's unfair competition claim that is premised on the same theory as Apple's antitrust claim. Monolithic Power Systems, 2007 WL 801886, at *6 (holding that Noerr-Pennington can provide immunity against California unfair competition claims).

c. Apple's other claims

Motorola contends that the Noerr-Pennington doctrine provides immunity not just to Apple's statutory antitrust and unfair competition claims, but to Apple's contract and tort claims also. As Motorola points out, courts have applied the Noerr-Pennington doctrine outside the antitrust context. Theme Promotions, Inc. v. News America Marketing FSI, 546 F.3d 991, 1006-1007 (9th Cir. 2008) (applying doctrine to claim for tortious interference with prospective economic advantage under California law); International Brotherhood of

Teamsters v. Philip Morris Inc., 196 F.3d 818, 826 (7th Cir. 1999) (applying Noerr-Pennington immunity to protect petitioning activity from liability for RICO suits); Tarpley v. Keistler, 188 F.3d 788, 794 (7th Cir. 1999) (applying doctrine to § 1983 claims); Video International Production, Inc. v. Warner-Amex Cable Communications, Inc., 858 F.2d 1075, 1084 (5th Cir. 1988) (applying doctrine to state law claim for tortious interference with contract). Courts have reasoned that because the Noerr-Pennington doctrine derives from the First Amendment, it should be applied broadly to protect the right to petition the government. New West, L.P. v. City of Joliet, 491 F.3d 717, 722 (7th Cir. 2007) (“Noerr-Pennington has been extended beyond the antitrust laws, where it originated, and is today understood as an application of the first amendment’s speech and petitioning clauses.”); White v. Lee, 227 F.3d 1214, 1231 (9th Cir. 2000) (explaining that because “Noerr-Pennington is a label for a form of First Amendment protection . . . to say that one does not have Noerr-Pennington immunity is to conclude that one’s petitioning activity is unprotected by the First Amendment”); Kottle v. Northwest Kidney Centers, 146 F.3d 1056, 1059 (9th Cir. 1998) (“the doctrine is a direct application of the Petition Clause”).

However, Motorola has cited no authority for the proposition that the Noerr-Pennington doctrine should apply to Apple’s breach of contract claims (counts 2, 3, and 4), and I conclude that applying immunity to Motorola from Apple’s breach of contract claims is not appropriate. Although the First Amendment protects Motorola’s right to petition the courts to enforce its patents, Apple’s breach of contract claims are based on the theory that Motorola agreed by contract that it would not enforce its patent rights until it offered a

license to Apple on fair, reasonable and nondiscriminatory terms. In other words, Apple contends that Motorola waived some of its petitioning rights through contract. It would be improper to use the Noerr-Pennington doctrine to bar Apple from enforcing that contract. Powertech Technology, Inc. v. Tessera, Inc., — F. Supp. 2d —, 2012 WL 1835699, *5 (N.D. Cal. May 21, 2012) (concluding that Noerr-Pennington does not provide immunity against breach of contract claims).

Similarly, Motorola has failed to cite any authority or develop any argument for applying Noerr-Pennington to Apple's equitable estoppel claim (count 1), which appears to be an alternative claim to its breach of contract claims. Because Motorola failed to develop any argument about why it should be immune from the equitable estoppel claim or why the estoppel claim should be treated differently from the contract claim, I will not apply Noerr-Pennington to the equitable estoppel claim. Cf. Garg v. Potter, 521 F.3d 731, 736 (7th Cir. 2008) (explaining that undeveloped arguments are waived).

As to Apple's tortious interference with contract claim (count 13), it is clear that this claim is not premised on Motorola's patent litigation. Rather, it is premised on Motorola's actions in relation to Qualcomm. Therefore, the Noerr-Pennington doctrine does not apply to that claim.

Finally, I note that Apple asserts three claims for declaratory judgment in its amended complaint. Apple seeks declarations that the terms of the license offered by Motorola to Apple were not fair, reasonable and nondiscriminatory (count 7); Motorola is not entitled to injunctive relief on its patent infringement claims (count 11); and Motorola misused its

patents by promising to offer fair licenses and then failing to do so (count 12). It is not clear from Apple's complaint whether its claims for declaratory judgment are based on a contract theory or an antitrust theory. To the extent that they are based on an antitrust theory, Motorola is immune under the Noerr-Pennington doctrine. To the extent that they are based on Apple's breach of contract theory or estoppel theory, they may proceed.

In sum, I am granting Motorola's motion for summary judgment on Apple's antitrust claim (count 5), its claim for unfair competition in violation of Cal. Bus. & Prof. Code § 17200 (count 6) as related to Motorola's licensing and disclosure obligations, and its claims for declaratory relief (counts 7, 11 and 12) to the extent they are based on antitrust or unfair competition theories of liability. Motorola is immune from liability for these claims under the Noerr-Pennington doctrine. I am denying Motorola's motion under the Noerr-Pennington doctrine with respect to Apple's remaining claims.

Because I am dismissing Apple's antitrust claim, I need not consider Motorola's argument that the antitrust claim is barred by the statute of limitations.

3. Apple's tortious interference with contract claim

Motorola has moved for summary judgment on Apple's claim that Motorola tortiously and unlawfully interfered with the Strategic Terms Agreement that Apple had entered into with Qualcomm in December 2009. Apple's Am. Cpt., dkt. #110, ¶¶ 190-195 (count 13). Under that agreement, Apple and Qualcomm agreed to terms under which Apple could purchase chipsets that would be used in Apple's products. The chipsets

incorporated Motorola's patented technology, and Motorola and Qualcomm had entered into a separate licensing agreement regarding the chipsets. Apple contends that Motorola committed the tort of interference with contract by terminating license and covenant rights with respect to Apple.

Apple and Qualcomm are both headquartered in California and both Apple and Motorola assume California law applies to Apple's tortious interference claim. Thus, I will apply California law. Auto-Owners Insurance Co. v. Websolv Computing, Inc., 580 F.3d 543, 547 (7th Cir. 2009) ("Courts do not worry about conflict of laws unless the parties disagree on which state's law applies.") (citation omitted). To establish the tort of intentional interference with contract under California law, a plaintiff must show:

(1) a valid contract between plaintiff and a third party; (2) defendant's knowledge of this contract; (3) defendant's intentional acts designed to induce a breach or disruption of the contractual relationship; (4) actual breach or disruption of the contractual relationship; and (5) resulting damage.

Pacific Gas & Electric Co. v. Bear Stearns & Co., 50 Cal. 3d 1118, 1126, 270 Cal. Rptr. 1 (Cal. 1990).

Motorola contends it is entitled to summary judgment on Apple's tortious interference claim because Apple cannot establish the last two elements of its claim. Specifically, Motorola contends that Apple has not shown that either it or Qualcomm breached the Strategic Terms Agreement or that the agreement was otherwise disrupted and that Apple cannot show that it has suffered any injury as a result of Motorola's terminating its license and covenant rights with respect to Apple.

I agree with Motorola. Apple concedes that Motorola's decision to terminate license

rights with respect to Apple did not cause Apple or Qualcomm to breach the Strategic Terms Agreement. Motorola's actions did not affect the terms of the agreement itself, because the agreement never purported to guarantee that Qualcomm's chipsets were covered by licenses to third-party patents. Additionally, Apple admits that it has continued to purchase chipsets from Qualcomm under the agreement. Apple's Br., dkt. #167, at 30. Apple does not contend that Motorola's actions have made the chipsets more expensive, that it has been forced to seek chipsets from a different manufacturer or that it has incurred additional licensing fees in response to Motorola's decision to terminate any license and covenant rights Apple may have enjoyed under Motorola's agreement with Qualcomm. In fact, Apple does not even submit evidence about what benefits it would have enjoyed under the licensing agreement and whether it would have paid Qualcomm or Motorola any licensing fees on top of what it paid Qualcomm for chipsets, if Motorola had not terminated license and covenant rights with respect to Apple. Apple implies that the chipsets would have been covered under the Qualcomm's licensing agreement with Motorola, but submits no evidence on the issue.

Apple contends that even though Motorola's actions have not interrupted performance of the contract between Apple and Qualcomm, Motorola's actions constituted tortious interference because they have made performance of the contract "more expensive and burdensome." Pacific Gas & Electric, 50 Cal. 3d at 1127 ("interference which makes enjoyment of a contract more expensive or burdensome may be actionable"). However, Apple has adduced no factual support to show that Motorola has caused its contractual relationship with Qualcomm to be more expensive or burdensome. In its brief, Apple relies

solely on the allegation that Motorola's actions caused Apple to file a lawsuit in a district court in California to clarify its rights to use chipsets manufactured by Qualcomm without threat of patent infringement litigation from Motorola. Apple v. Motorola Mobility, Inc., Case No. 12-cv-355 (S.D. Cal.). Apple argues that the cost of the California litigation qualifies as "damages" arising out of Motorola's tortious interference.

Apple's theory of damages arising out of the California litigation was not pleaded in its complaint. This makes sense because Apple filed the amended complaint in this case in October 2011 and did not commence the California lawsuit until February 2012. Even if it were appropriate to consider this new theory of damages, Apple has included no facts about the California lawsuit or its costs in its proposed findings of fact or responses to Motorola's proposed facts. Apple cannot create a genuine factual dispute sufficient to defeat summary judgment simply by making a factual assertion in its brief. Moreover, even if I considered Apple's assertions about the California lawsuit, Apple fails to connect its litigation costs to the contract between itself and Qualcomm. Apple argues that it was forced to litigate to protect its contractual rights. Apple's Br., dkt. #167, at 31. However, according to Apple's own description of its litigation, it is not suing to protect its rights under its agreement with Qualcomm. Rather, it is suing Motorola in an attempt to enforce the terms of *Motorola's* contract with Qualcomm. Apple's own agreement with Qualcomm did not promise any of the benefits of which Apple now seeks to take advantage.

In sum, Apple has adduced no evidence that Motorola's decision to terminate license and covenant rights with respect to Apple interfered with Apple's rights or benefits under

its agreement with Qualcomm or made Apple's contract with Qualcomm more expensive or burdensome. Therefore, Motorola is entitled to summary judgment on Apple's claim of tortious interference with contract.

4. Apple's claim under Cal. Bus. & Prof. Code § 17200

As discussed above, Apple's claim under Cal. Bus. & Prof. Code § 17200 can be divided into two separate theories: (1) Motorola violated the law by initiating patent litigation against Apple after failing to offer Apple a license on fair, reasonable and nondiscriminatory terms; and (2) Motorola violated the law by suspending its contract with Qualcomm as it related to Apple.

Motorola has moved for summary judgment on Apple's claim under the first theory, contending that it is barred by California Civil Code § 47(b), which provides that the filing of a lawsuit is privileged activity immune from tort liability. Because I concluded above that the Noerr-Pennington immunity doctrine applies to this claim, I need not address whether the claim would be barred by the California litigation privilege.

With respect to Apple's second theory of liability, Motorola contends that Apple has not proven that it suffered an economic injury, as required under Cal. Bus. & Prof. Code § 17200. Kwikset, 246 P.3d at 884-85. I agree. To defeat Motorola's motion for summary judgment, Apple was required to adduce specific evidence showing that it lost money or property as a result of Motorola's termination of any license and covenant rights that flowed to Apple through Qualcomm. As explained in the discussion of Apple's tortious interference

claim, Apple has failed to adduce any specific facts on this issue. Therefore, Motorola is entitled to summary judgment on this claim.

5. Apple's breach of contract claims

Motorola has moved for partial summary judgment on Apple's breach of contract claims, seeking a determination from the court that Apple has not suffered any damages from the alleged breaches. (Motorola did not move for summary judgment on Apple's request for specific performance of Motorola's contractual obligations.) The only damages Apple seeks to recover through its contract claims are litigation costs. According to Apple's expert's report, Apple believes it is entitled to a minimum of \$31,948,128.31 in damages based on "litigation costs, including attorneys' fees, Apple has incurred to date in (1) having to defend the ITC 745 Investigation; (2) having to defend the District Court Case; and (3) prosecuting the [present case] to establish Motorola's violation of its obligations to ETSI and IEEE." Napper Rep., dkt. #153-36 at 6. Motorola contends that litigation costs cannot be recovered as damages from a breach of contract claim.

The first question is what forum's law applies to Apple's contract claims. Apple (a California company) is suing Motorola (an Illinois company) for violation of commitments to ETSI (based in France) and IEEE (based in New York). Both parties agree that ETSI's bylaws are governed by the laws of France, so I will apply French law to Apple's claims involving ETSI. (Under Fed. R. Civ. P. 44.1, courts determining foreign law "may consider any relevant material or source, including testimony, whether or not submitted by a party

or admissible under the Federal Rules of Evidence.” Apple submitted an expert report from Philippe Delebecque regarding French contract law. Dkt. #159. Motorola submitted an excerpt regarding French law on damages from an English language treatise. Barry Nicholas, The French Law of Contract (2d ed. 1992), dkt. #176-1.)

Neither party undertakes an adequate choice of law analysis with respect to claims concerning IEEE, and both sides cite variously to Wisconsin, New York and Illinois law in support of their respective positions. However, it does not appear that there is a conflict among Wisconsin, New York or Illinois law relevant to the issues in this case. Thus, I will apply Wisconsin law to Apple’s claims concerning IEEE. Danielson v. Gasper, 2001 WI App 12, ¶ 5, 240 Wis. 2d 633, 623 N.W.2d 182 (under Wisconsin’s choice of law principles, if there is no genuine conflict between Wisconsin law and law of other possible state, court applies Wisconsin law); Tanner v. Jupiter Realty Corp., 433 F.3d 913, 915 (7th Cir. 2006) (federal court applies choice of law principles of forum state to determine which state’s substantive law governs contract claim).

Motorola contends that under the laws of Wisconsin, France or any other jurisdiction, Apple cannot recover attorney fees as damages for a breach of contract action. However, Motorola does not cite any cases establishing such a bright-line rule. Motorola cites In re Guardianship & Protective Placement of Evelyn O., 214 N.W.2d 434, 571 N.W.2d 700 (1997), and Computer Docking Station Corp. v. Dell, Inc., 547 F. Supp. 2d 948, 951 (W.D. Wis. 2007), for the general “American rule” that a prevailing party may not recover attorneys fees unless authorized by statute or contract. However, Apple is not seeking an

award of attorney fees to a prevailing party. It is seeking attorney fees as damages incurred because of Motorola's alleged breach of contract.

As Motorola concedes in its reply brief, Wisconsin law allows recovery of attorneys fees as contractual damages in some situations. Motorola's Br., dkt. #173, at 7 (citing Repinski v. Clintonville Federal Savings & Loan Association, 49 Wis. 2d 53, 58, 181 N.W.2d 351, 354 (1970) ("An award of damages for breach of contract should compensate the injured party for losses necessarily flowing from the breach. . . .When litigation is a natural and proximate result of the breach, recovery may be had as damages for attorney's fees necessarily incurred in that litigation.") (dictum). Additionally, Motorola concedes that French law allows recovery for damages that are the "immediate and direct and foreseeable result of breach." Id. However, Motorola contends that the litigation costs that Apple incurred are not compensable because many specific costs that Apple's expert included in his damages calculations, such as the costs of attorneys' meals and laundry, have too tenuous a relationship to Motorola's alleged breach.

Motorola has not shown that it is entitled to summary judgment on this issue. Its legal analysis is incomplete; it cited no cases discussing whether a party can recover as contract damages the costs it incurred in previous litigation with the same defendant, let alone any cases actually holding that a party may not recover such costs. Further, Motorola raised several new arguments in its reply brief regarding whether Apple's litigation costs were the direct and foreseeable result of Motorola's alleged breach. Therefore, I am denying Motorola's motion for summary judgment on this issue. If Motorola wishes to make further

arguments regarding whether certain costs identified by Apple's expert should be excluded, it may file a motion in limine on the subject.

B. Apple's Motion for Partial Summary Judgment

Apple has moved for partial summary judgment, seeking to establish certain elements of its claims. Because I have concluded that Motorola is entitled to summary judgment on all of Apple's claims with the exception of Apple's contract and estoppel claims, I will consider Apple's arguments only as they relate to those claims. In particular, Apple requests a determination that:

- Motorola entered into binding contractual obligations with ETSI and IEEE to license its declared-essential patents on fair, reasonable and nondiscriminatory terms.
- Apple is a third-party beneficiary of Motorola's contractual obligations to ETSI and IEEE.
- In submitting technical proposals to ETSI for inclusion of Motorola technology in ETSI standards, Motorola was obligated by ETSI policy to make a bona fide effort to identify essential intellectual property rights that might be required by the technical proposal before the adoption of the technical proposal into the standard.
- Motorola was obligated to make a bona fide effort to disclose the applications leading to the issuance of the '898, '559 and '697 patents to ETSI before the adoption of Motorola's technical proposals, even when those patent applications were unpublished.
- Motorola disclosed the patent applications issuing as the '898, '559 and '697 patents after the adoption of the standards to which Motorola contends those patents are essential.

Notably, Apple does not seek a determination that Motorola's failure to disclose its

intellectual property rights was intentional, that Motorola failed to comply with the disclosure requirements of ETSI and IEEE policies or that Motorola breached its contractual obligations by demanding unreasonable licensing fees for its patents from Apple.

1. Motorola's contracts with ETSI and IEEE

As discussed above, I am applying Wisconsin law to Apple's breach of contract claims related to IEEE and French law to the claims related to ETSI.

To form a valid contract under Wisconsin law, there must be evidence of an offer, acceptance and consideration, Kamikawa v. Keskinen, 44 Wis. 2d 705, 710, 172 N.W.2d 24, 26 (1969), and an understanding between the parties regarding the essential terms of the contract. Metropolitan Ventures, LLC v. GEA Associates, 2006 WI 71, ¶ 24, 291 Wis. 2d 393, 717 N.W.2d 58. Apple's expert states that French law requires the same general elements, which Motorola has not disputed. Delebecque Rep., dkt. #146, ¶ 31 ("French law considers that the contractual agreement is reached . . . as of the moment the parties have reached an agreement on the essential elements of the contract.").

In this case, the combination of the policies and bylaws of the standards-setting organizations, Motorola's membership in those organizations and Motorola's assurances that it would license its essential patents on fair, reasonable and nondiscriminatory terms constitute contractual agreements. The intellectual property rights policies of ETSI and IEEE constituted offers to Motorola for membership in the organization in exchange for Motorola's ability to participate in developing technical standards. The "offers" set out the

essential terms of the contract, namely, that members must abide by intellectual property rights policies. Under IEEE's policy, members must submit letters of assurance including a commitment to license essential patents under reasonable and nondiscriminatory terms. Similarly, ETSI's policy states that its members shall use "reasonable endeavors" to inform the organization of essential patents "in a timely fashion." All members are asked to grant licenses to essential patents on fair, reasonable and nondiscriminatory terms; if they refuse, they must explain their reasons in writing.

Motorola accepted the offers and agreed to be bound by these policies when it joined ETSI and IEEE. Later, Motorola confirmed that it was bound by the organizations' policies when it submitted declarations and letters of assurance stating that it would license its patents on fair, reasonable and nondiscriminatory terms. In particular, Motorola sent declarations to ETSI regarding the '697, '898, '230 and '559 patents, and sent letters of assurance to IEEE regarding the '516, '193, '223 and '712 patents.

Both Motorola and the organizations benefited from this arrangement and thus, the element of consideration is satisfied. Motorola received the benefit of participating in the standards development process and influencing the choice of technology for the standards. The organizations benefited from Motorola's commitments by knowing that their technical standards would be available for use by third parties.

Several courts have reached similar conclusions. Microsoft Corp. v. Motorola, Inc., 2012 WL 2030098, *5-6 (W.D. Wash. June 6, 2012) (holding that contract was formed through Motorola's commitments to IEEE to license patents essential to 802.11 standard

on reasonable and nondiscriminatory terms); Research In Motion Ltd. v. Motorola, Inc., 644 F. Supp. 2d 788, 797 (N.D. Tex. 2008) (holding at motion to dismiss stage that plaintiff had stated breach of contract claim based on defendant's failure to offer FRAND terms as it had agreed to ETSI and IEEE); ESS Technology, Inc. v. PC-Tel., Inc., 1999 WL 33520483, *4 (N.D. Cal. Nov. 4, 1999) (holding that, as third-party beneficiary of contract between standards-setting organization and defendant-essential-patent holder, software manufacturer had properly stated claim for specific performance of agreement requiring defendant to license patents on nondiscriminatory and reasonable terms).

In its opposition brief, Motorola states that it “does not dispute that it made commitments to the industry groups,” and “does not dispute that obligations flow from those commitments.” Motorola's Br., dkt. #164, at 1. However, Motorola argues that its commitments are not binding contracts and that neither the industry groups nor Apple can enforce those commitments. In other words, Motorola argues that although it made promises, the promises are largely meaningless because they cannot be enforced by either the organizations or third parties.

Motorola relies largely on language from ETSI's and IEEE's policies to argue that the organizations do not intend to enforce their intellectual property rights policies. IEEE's policy states that “[n]o license is implied by the submission of a Letter of Assurance,” and that “IEEE is not responsible for determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance . . . are reasonable and non-discriminatory.” ETSI's policy states that “[s]pecific licensing terms and negotiations are

commercial issues between the companies and shall not be addressed within ETSI.”

These provisions do not say that the organizations will not enforce their policies. Rather, the provisions make clear that organizations will not be responsible for deciding what terms constitute a fair, reasonable and nondiscriminatory license. They will not resolve licensing disputes. However, ETSI and IEEE still require members to offer reasonable and nondiscriminatory licenses to their essential patents in order to comply with the conditions of membership and their declarations. ETSI’s policies state explicitly that “[a]ny violation of the POLICY by a MEMBER shall be deemed to be a breach, by that MEMBER, of its obligations to ETSI.” Similarly, in its commitment to IEEE, Motorola agreed that it would “license those patents on a non-discriminatory basis offering fair and commercially reasonable terms.”

Motorola has several arguments about whether it complied with the terms of ETSI’s and IEEE’s policies by making reasonable efforts to disclose its patents and by offering to negotiate a licensing agreement with Apple. However, these arguments relate to whether Motorola breached the contracts, not whether contractual obligations exist. Neither Apple nor Motorola moved for summary judgment on the element of breach.

In sum, I am granting Apple’s motion for summary judgment with respect to the existence of contracts between Motorola and the standards-setting organizations.

2. Apple’s status as a third-party beneficiary

The next question is whether Apple has a right to enforce the contracts as a third

party beneficiary. Becker v. Crispell-Snyder, Inc., 2009 WI App 24, ¶ 9, 316 Wis. 2d 359, 763 N.W.2d 192 (party wishing to enforce contract must either be party to contract or third-party beneficiary). Under Wisconsin law, a third-party beneficiary is one whom the contracting parties intended to “directly and primarily” benefit. Id. at ¶ 11 (citing Winnebago Homes, Inc. v. Sheldon, 29 Wis. 2d 692, 699, 139 N.W.2d 606 (1966)). The benefit proven must be direct; an indirect benefit incidental to the primary contractual purpose is insufficient. Id. French law is consistent with Wisconsin law on this issue. Delebecque Rep., dkt. #159, ¶ 25.

Motorola advances several arguments in support of its contentions that its commitments to ETSI and IEEE were not intended primarily to benefit potential users of the standards. However, none of its arguments are persuasive. The primary purpose of the ETSI and IEEE intellectual property rights policies and Motorola’s licensing commitments is to protect companies that need to obtain licences in order to practice the standards adopted by the organizations. This is clear from the language of the policies. For example, ETSI’s policy states that an “objective” of the policy is to “reduce the risk” of an essential patent’s becoming “unavailable.” The entities that care the most about the availability of a license are those entities such as Apple, who will incorporate the standards into their own products.

As a potential user of the standards at issue and a prospective licensee of essential patents, Apple is a third party beneficiary of the agreements between Motorola and IEEE and Motorola and ETSI. See also Microsoft, 2012 WL 2030098, at *5-6 (holding that

Microsoft was third-party beneficiary of Motorola's agreements with standard setting organization because the "commitments are clearly designed to benefit potential licensees of Motorola's standard essential patent by ensuring that such patents are readily accessible to everybody at reasonable rates").

3. Scope of contractual obligations to ETSI

Apple also seeks summary judgment on issues related to the scope of Motorola's contractual obligations to ETSI. In particular, Apple seeks a determination that (1) the ETSI intellectual property rights policy required Motorola to make a "bona fide" effort to identify its intellectual property rights that might be essential to a technical standard *before* the technical proposal was adopted into the standard; and (2) that Motorola was required to include its unpublished patent applications as part of those disclosures.

With respect to the first issue, the ETSI intellectual property rights policy is clear.

It states that members

submitting a technical proposal for a STANDARD shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's [intellectual property rights] which *might* be ESSENTIAL *if that proposal is adopted*.

By using the terms "might" and "if," the policy clearly requires members to make efforts to disclose intellectual property rights *before* a standard is adopted.

Motorola has two arguments in opposition, neither of which is persuasive. First, it says it was not required to disclose patents or patent applications at the time a technical proposal is made or during work meetings relating to the technical development of standards.

This argument is not responsive to Apple's motion. Apple has not argued that Motorola was required to disclose its intellectual property rights during work meetings or when it submitted technical proposals. Apple has argued only that Motorola was required to disclose its patents and patent applications at some point before a technical proposal is adopted into a standard.

Second, Motorola argues that it was relieved of its obligation to disclose specific patents by submitting a general declaration to ETSI, in which it agreed to license any of its essential patents on fair, reasonable, and nondiscriminatory terms. However, the ETSI policies make clear that the submission of a general declaration does not relieve a member of its duty to make a timely declaration of specific patents and applications that it believes may be essential to an ETSI standard. The ETSI Guide on Intellectual Property Rights states that use of a general licensing declaration "does not take away the obligation for members to declare essential patents to ETSI. . . ."

As to the issue of Motorola's obligation to disclose unpublished patent applications, ETSI's policy makes clear that members are required to disclose patents and "applications therefor." The policy exempts "confidential information." Apple asserts several reasons in its brief about why Motorola's patent applications issuing as the '898, '559 and '697 patents do not qualify as "confidential." Apple's Br., *dk.* #144, at 22-23. For example, Apple contends that Motorola waived any confidentiality privilege that might have applied by publicly disclosing the relevant language in those applications through its technical proposals to the relevant working groups and through foreign patent applications.

Motorola's only response is to assert that ETSI members are not required to disclose confidential information and that patent applications may qualify as confidential. This is nonresponsive to Apple's arguments. By failing to respond to Apple's contention that the specific patent applications at issue in this case were not confidential, Motorola has waived any arguments in opposition and has failed to meet its burden at summary judgment of showing the existence of material facts in dispute regarding this issue of the scope of its contractual obligations to ETSI. Wojtas v. Capital Guardian Trust Co., 477 F.3d 924, 926 (7th Cir. 2007) ("A failure to oppose an argument permits an inference of acquiescence and 'acquiescence operates as a waiver.'" (quoting Cincinnati Insurance Co. v. East Atlantic Insurance Co., 260 F.3d 742, 747 (7th Cir. 2001))).

4. Timing of Motorola's disclosure

Finally, Apple seeks a determination that Motorola disclosed the patent applications issuing as the '898, '559 and '697 patents after Motorola made technical proposals using technology from those patents and after ETSI adopted standards to which Motorola contends those patents are essential. I am granting Apple's motion on this issue because it is uncontested.

C. Issues Remaining for Trial

I am dismissing all of Apple's claims with the exception of its breach of contract and equitable estoppel claims and its declaratory judgment claims premised on a breach of

contract or estoppel theory.

With respect to the breach of contract claims, Apple has shown that Motorola's membership in ETSI and IEEE and the intellectual property declarations it made established a contractual relationship that required Motorola to license its essential patents to third parties on fair, reasonable and nondiscriminatory terms. Additionally, Apple has shown that it is a third-party beneficiary of those contracts and has a right to enforce them. Apple has proven that Motorola's membership in ETSI required Motorola to make reasonable efforts to disclose any intellectual property rights that might have become essential to standards being considered by ETSI before those standards were adopted, including Motorola's unpublished patent applications that became the '898, '559 and '697 patents. Finally, Apple has shown that Motorola disclosed its '898, '559 and '697 patents to ETSI after Motorola made technical proposals using technology from those patents and after ETSI adopted standards to which Motorola contends those patents are essential.

However, there are still several unresolved issues related to Apple's breach of contract claims. To succeed on its claims, Apple must prove that Motorola breached a contract by failing to make bona fide efforts to disclose its patents to ETSI in a timely manner and by failing to offer a license to its essential patents to Apple on fair, reasonable and nondiscriminatory terms. As to the licensing offer, Apple must prove that Motorola's initial offer of a 2.25% royalty rate and attempts to negotiate were unfair, unreasonable or discriminatory and violated Motorola's commitments to ETSI and IEEE.

Additionally, Apple must prove that it suffered damages that are clearly connected to

Motorola's breach. At this point, it is not clear how Apple intends to prove that it was damaged by Motorola's failure to disclose patents to ETSI in a timely manner. Additionally, Apple must prove that any litigation damages it seeks to recover are directly attributable to Motorola's breach.

ORDER

IT IS ORDERED that

1. Defendant Motorola Mobility, Inc.'s motion for partial summary judgment, dkt. #150, is GRANTED IN PART and DENIED IN PART.

The motion is GRANTED with respect to plaintiff Apple Inc.'s claims that Motorola violated § 2 of the Sherman Act (count 5), that it violated Cal. Bus. & Prof. Code § 17200 (count 6), and that it tortiously interfered with contract (count 13), and with respect to Apple's requests for declaratory relief in conjunction with these claims.

The motion is DENIED in all other respects.

2. Plaintiff Apple Inc.'s motion for partial summary judgment, dkt. #143, is GRANTED. The court finds as a matter of law that

- a. Motorola entered into binding contractual obligations with ETSI and IEEE to license its declared essential patents on fair, reasonable and nondiscriminatory terms.
- b. Apple is a third-party beneficiary of Motorola's contractual obligations to ETSI and IEEE.
- c. In submitting technical proposals to ETSI for inclusion of Motorola technology in ETSI standards, Motorola was obligated by ETSI policy to make a bona fide effort to identify essential intellectual property rights that might be required by the technical proposal before the adoption of the technical proposal into the standard.

d. Motorola was obligated to make a bona fide effort to disclose the applications leading to the issuance of its United States patents 6,175,559, 6,359,898 and 6,246,697 to ETSI before the adoption of Motorola's technical proposals, even when those patent applications were unpublished.

e. Motorola disclosed the patent applications issuing as the '898, '559 and '697 patents after the adoption of the standards to which Motorola contends those patents are essential.

Entered this 10th day of August, 2012.

BY THE COURT:

/s/

BARBARA B. CRABB

District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

APPLE, INC.,

Plaintiff,

v.

MOTOROLA MOBILITY, INC.,

Defendant.

OPINION and ORDER

11-cv-178-bbc

A court trial is scheduled for November 5, 2012 to resolve plaintiff Apple, Inc.'s claims for breach of contract, equitable estoppel and declaratory judgment, all premised on Apple's contention that defendant Motorola Mobility, Inc. promised two standards-setting organizations that it would offer licenses to its standards-essential patents on fair, reasonable and nondiscriminatory terms and then refused to do so.

Now before the court are the parties' motions in limine. I have grouped this for discussion purposes and resolved these as explained below.

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A. Motions Regarding the Scope of Trial

It is clear from several of the motions that the parties have significant disagreements about the scope of the upcoming trial. The main disagreement is whether the trial will result in a determination of a specific rate or range that constitutes a fair, reasonable and nondiscriminatory license for Motorola's patents and an order requiring Motorola to offer that license to Apple. According to Motorola, the trial cannot and should not address what constitutes a fair, reasonable and nondiscriminatory license. Instead, the only issues that should be resolved at trial with respect to Apple's breach of contract claim are whether Motorola's initial offer of a 2.25% royalty rate was unfair, unreasonable or discriminatory and whether Motorola failed to negotiate in good faith. Motorola suggests that if Apple prevails on its breach of contract claim, Apple's only remedy would be nominal damages and perhaps an order from the court instructing the parties to negotiate a license. (Apple reduced its damages demand to nominal damages of less than \$20 when it filed its motion for a court trial. Dkt. #255.)

Motorola finds support for its position from statements I made during a hearing on Apple's request for a preliminary injunction and the order issued at summary judgment. During the April 26, 2011 hearing, I stated

[A]t some point the court could say you haven't negotiated fairly. I mean, it wouldn't be proper for the Court to say you haven't negotiated fairly, you should really be paying 1.36 or something like that. But you could, after a determination of the facts, decide that one party or the other had not been participating reasonably in any attempt to negotiate a license.

Dkt. #90, Apr. 26, 2011 Hrg. Tr. at 82:11-18. See also id. at 86:11-22 (The court: "My sense is that if the Court could do anything, it would only be in the situation in which the parties had absolutely refused and the party with the essential patents just said we're not going to — we aren't going to engage in any kind of negotiation; we don't want a license; we don't have to

license; we're not going to do anything."'). However, these statements did not limit the issues to be resolved in this case or limit the remedies to which Apple can seek at trial. They were made during a preliminary review of the case, before the parties had developed the facts or legal theories.

Additionally, the summation in the summary judgment opinion regarding the issues remaining for trial did not restrict Apple from seeking a particular remedy or limit the type of evidence that may be presented at trial. In an opinion and order entered August 10, 2012, I granted Apple's motion for partial summary judgment and concluded that Motorola was a party to binding contracts with the European Telecommunications Standards Institution (ETSI) and the Institute of Electrical and Electronics Engineers (IEEE) and that those contracts required Motorola to license its declared-essential patents to Apple on fair, reasonable and nondiscriminatory terms. Dkt. #194 at 38-42. However, I pointed out that there were still several unresolved issues related to Apple's breach of contract claims, stating:

Apple must prove that Motorola's initial offer of a 2.25% royalty rate and attempts to negotiate were unfair, unreasonable or discriminatory and violated Motorola's commitments to ETSI and IEEE. Additionally, Apple must prove that it suffered damages that are clearly connected to Motorola's breach.

Id. at 46-47. Although Motorola contends that these issues identified in the court's summary judgment opinion are the *only* issues remaining in the case, that is not what the opinion says. At summary judgment, the focus was on the interpretation of the ETSI and IEEE contracts, as well as damages issues. Neither party had discussed the type of evidence that Apple would present to prove its breach of contract claims and neither party had raised issues related to equitable relief. Thus, I did not include in the opinion any discussion of issues related to equitable relief or of Apple's theories of liability that were not raised in the parties' summary

judgment briefing. However, this does not mean that Apple is barred from raising other issues at trial; Apple may pursue any theories of liability and requests for relief that it pleaded in its amended complaint and that have not been explicitly dismissed from the case.

1. Motorola's motion to preclude Apple from seeking specific performance, dkt. #280

Motorola's motion to preclude Apple from seeking specific performance is related to its interpretation of the issues remaining in the case. If Apple prevails on its claim that Motorola breached its contracts with ETSI and IEEE by failing to offer a fair, reasonable and nondiscriminatory license to Apple, Apple intends to seek an order requiring specific performance of Motorola's contractual commitments. In particular, Apple intends to ask the court to order Motorola to offer a license for its standards-essential patents to Apple on fair, reasonable and nondiscriminatory terms. Motorola has moved for an order precluding Apple from seeking specific performance, contending that the court cannot order that because (1) Motorola's obligations under the contracts with the standards-setting organizations are too vague; (2) there is not enough evidence in the record from which the court could determine appropriate license terms; and (3) supervising the performance would not be practicable for the court. I am denying Motorola's motion.

With respect to its first argument, Motorola contends that specific performance is an exceptional remedy that is appropriate only if damages are inadequate and only if the terms of the contracts at issue are sufficiently specific. Motorola contends that its contracts with the standards-setting organizations are not specific because they do not explain what constitutes a "fair, reasonable and nondiscriminatory" license and they do not provide instructions on how

to determine appropriate license terms.

It is true that the “normal remedy for breach of contract is an award of damages,” while specific performance is an “exceptional” remedy. Miller v. LeSea Broadcasting, Inc., 87 F.3d 224, 230 (7th Cir. 1996). Additionally, courts generally order specific performance “only when the terms of the contract are sufficiently specific to allow the precise drafting of such an order.” TAS Distributing Co. v. Cummins Engine Co., 491 F.3d 625, 637 (7th Cir. 2007) (Illinois law). See also Krause v. Holand, 33 Wis. 2d 211, 214, 147 N.W.2d 333 (1967) (request for specific performance will normally be denied “if the essential terms of the contract are not established with clarity”).

I conclude that specific performance may be an appropriate remedy under the circumstances of this case. In fact, it may be the only appropriate remedy. As I held previously, Motorola’s declarations to ETSI and IEEE constitute binding agreements to license its essential patents on fair, reasonable and nondiscriminatory terms, and Apple is a third party beneficiary to those agreements. Dkt. #194 at 42. As a third party beneficiary, Apple is entitled to a license of Motorola’s patents on fair, reasonable and nondiscriminatory terms. Unless and until Motorola gives Apple a fair license to its declared-essential patents, Apple will continue to face the threat of patent infringement litigation from Motorola. It would be highly inefficient to require Apple to bring a new lawsuit for monetary damages or declaratory relief each time Motorola sues it for patent infringement. Additionally, it makes little sense to order the parties to continue negotiating a license when they have been unable to reach an agreement through five years of negotiations.

Instead, it makes sense to allow Apple to sue for specific performance of Motorola’s

contractual obligations and for the court to determine license terms, if necessary. In fact, in situations such as this in which the parties cannot agree on the terms of a fair, reasonable and nondiscriminatory license, the court may be the only forum to determine license terms. Both ETSI and IEEE have declared their unwillingness to assist parties in determining license terms or in resolving disputes between the parties. E.g., dkt. #282-3, 2003 Report of the GA ad hoc group on ETSI's Intellectual Property Rights Policy operation, at § 4.4 (ETSI is "unable to define FRAND conditions" and "a court of law seems to be the only authority which can ultimately decide whether, or not, terms are Fair, Reasonable And Non-Discriminatory"); dkt. #282-5, ETSI Guide on Intellectual Property Rights, § 4.1 ("Specific licensing terms and negotiations are commercial issues between the companies and shall not be addressed within ETSI."); dkt. #282-6, IEEE-SA Standards Board Bylaws, § 6.2 (IEEE not responsible for "determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance, if any, or in any licensing agreements are reasonable or non-discriminatory."). As the District Court for the Western District of Washington explained recently in a similar case involving Motorola's licensing commitments to IEEE,

Having made the determination that Motorola must grant a [reasonable and nondiscriminatory] license for its essential patents, the court is left with the inescapable conclusion that a forum must exist to resolve honest disputes between the patent holder and implementer as to what in fact constitutes a [reasonable and nondiscriminatory] license agreement. Here, the courthouse may be the only such forum. . . . Although no specific remedy has been determined, and certainly no remedy has been proven, the court declines to dismiss from Microsoft's possible remedies the very license agreement to which the court has already determined it is entitled.

Microsoft Corp. v. Motorola, Inc., Case No. C10-1823JLR, 2012 WL 4827743, *6 (W.D. Wash. Oct. 10, 2012).

I am not persuaded by Motorola's argument that its commitments to the standards-setting organizations are too vague to allow the court to determine an appropriate license rate. In making this argument, Motorola fails to consider that specific performance is a remedy that would be considered only if Apple proves that Motorola has refused to give Apple a license on fair, reasonable and nondiscriminatory terms. In other words, before the court considers the remedy of specific performance, Apple must first prove that Motorola breached its contract. To prove this, Apple will have to show that Motorola's licensing offers have not been fair, reasonable and nondiscriminatory. This will require the court to determine first what rate or range of rates would qualify as a fair, reasonable and nondiscriminatory license offer for Motorola's standards-essential patents and then determine whether Motorola's licensing offers were a breach of its duty to offer a license within that range. If I reach the question whether specific performance would be an appropriate remedy, I necessarily will have determined a meaning for the phrase "fair, reasonable and nondiscriminatory" with respect to Motorola's standards-essential patents, and the only remaining question will be whether Motorola should be required to license its patents to Apple on those terms.

I am also not persuaded by Motorola's argument that Apple should be barred from seeking specific performance because there is insufficient evidence from which the court could determine a fair, reasonable and nondiscriminatory rate in this case. Motorola's argument on this point is simply a critique of the methods and opinions of Apple's experts. In particular, Motorola criticizes the methods used by Apple's experts and argues that the experts failed to consider the hundreds of essential patents owned by Motorola as well as the confidential settlement negotiations between the parties after January 4, 2011. Motorola is free to make

these arguments at trial and to present contrary opinions from its own experts to support its argument that it has offered fair licensing terms to Apple. However, I will not limit Apple's possible remedies simply because Motorola disagrees with the opinions of Apple's experts.

Finally, Motorola does not explain why the court would be required to engage in any monitoring or supervision of the parties as a result of an order of specific performance. Therefore, I will not bar Apple from seeking the remedy of specific performance at trial.

2. Motorola's motion to preclude Apple from admitting evidence arising after January 4, 2011 in support of its breach of contract and estoppel claims, dkt. #289

Motorola contends that all evidence relating to its conduct or the parties' patent license negotiations after January 4, 2011 should be precluded under the parties' Mutual Non-Disclosure and Rule 408 Agreement. The agreement places restrictions on the use of "Confidential Information" exchanged during settlement negotiations, dkt. #291-1, §§ 1-5, as well as restrictions on the use of "communications and documents exchanged between [the parties] in furtherance of their joint negotiation efforts." *Id.*, § 10. Under § 10(C) of the agreement,

No party to this Agreement shall use any documents or information contained or exchanged in any such meeting, discussion or correspondence (i) in any adversarial proceeding or as the basis for any adversarial proceeding in any forum in the United States or in any other country; (ii) in any manner or for any purpose other than in connection with the settlement negotiations between them; or (iii) as the basis for a declaratory judgment action . . . or other proceedings before any court. . . . The parties further agree that the existence of the settlement meetings, and documents and information prepared for or exchanged at any such meetings will not be admissible as evidence or used for any other purpose including, without limitation, filings with any court. . . .

Id., § 10.C. The agreement was extended in November 2011 until November 16, 2013. Dkt.

#291-2. Motorola contends that this language precludes Apple from introducing evidence of Motorola's conduct after January 4, 2011 or of any evidence obtained after that date.

I am granting Motorola's motion in part and denying it in part. I agree with Motorola that the parties' non-disclosure agreements limit the parties' ability to introduce certain types of evidence at trial. In particular, the non-disclosure agreements preclude the parties from introducing evidence of the parties' settlement discussions and of information and documents produced and exchanged during settlement negotiations. Dkt. #291-1, § 10(A); dkt. #291-2, § 4.

However, I disagree with Motorola's argument that the non-disclosure agreements preclude *all* evidence relating to the parties' conduct after January 4, 2011. The January 2011 agreement provides exceptions, generally allowing for the disclosure of information that is acquired independently of settlement discussions. Dkt. #291-1, § 2 ("Recipient is not obligated to maintain as Confidential [information that] (i) is now available or becomes available to the public . . . (iii) is lawfully obtained from a third party or parties without the duty of confidentiality; (iv) is known to the Recipient prior to such disclosure; or (v) is independently developed by Recipient without the use of any Discloser's Confidential Information or any breach of this Agreement."); § 10.C ("The restrictions of [] paragraph 10(C) shall not apply to any document or information which (a) is in the public domain, or (b) is properly obtained by a party to this Agreement in discovery or otherwise from some source other than the settlement negotiations between them."). Additionally, the November 2011 agreement includes an exception allowing either party to "submit[] the Confidential Information in the Pending Litigation to establish its position that it has engaged in good faith negotiations, or to address

any inaccurate or incomplete position taken by another party. . . .” Dkt. #291-2, § 15. Therefore, Apple may introduce evidence of information or activities arising after January 4, 2011 that fall under these exceptions to the non-disclosure agreements.

Motorola did not move to exclude any specific evidence that Apple intends to introduce, so I cannot provide any further guidance for the parties on this issue beyond stating that the parties are both constrained by the explicit prohibitions of the non-disclosure agreement, but not beyond those explicit prohibitions.

3. Motorola’s motion to exclude evidence and references to irrelevant standards and standards-setting bodies, dkt. #298

Apple’s breach of contract claims are premised on Motorola’s commitments to ETSI and IEEE with respect to certain standards, including ETSI’s Universal Mobile Telecommunications System standard, the General Packet Radio Service functionality of ETSI’s Global System for Mobile Communications standard and the IEEE’s 802.11 standard. Motorola has moved to exclude evidence relating to standards-setting organizations and standards that are not at issue in this case. Apple opposes the motion, contending that Motorola has made such evidence an issue by introducing evidence regarding its practices in relation to other standards-setting organizations.

I am granting this motion in part and denying it in part. I agree with Motorola that testimony and evidence regarding standards-setting bodies and standards other than ETSI, IEEE and their standards should be precluded because it is irrelevant and would be waste of time. Thus, Apple will be precluded from arguing that Motorola breached its contractual obligations

to other organizations or failed to disclose patents relevant to other standards not at issue. However, if Motorola introduces evidence of its practices with respect to other standards or standards-setting organizations in an attempt to show that it made a bona fide effort to comply with its disclosure and licensing obligations to ETSI and IEEE, Apple may introduce evidence to the contrary.

**B. Motions Regarding the Relevance of Orders Issued in the
Related Patent Infringement Proceedings**

The patents at issue in this case are Motorola's United States Patents Nos. 5,636,223 (the '223 patent), 5,311,516 (the '516 patent), 5,572,193 (the '193 patent), 5,319,712 (the '712 patent), 6,175,559 (the '559 patent), 6,246,697 (the '697 patent) and 6,359,898 (the '898 patent). All of these patents have been the subject of prior litigation between Motorola and Apple, either in the International Trade Commission or federal court. The '697 and '223 patents were the subject of In re Certain Wireless Communication Devices, Portable Music and Data Processing Devices, Computers and Components Thereof, U.S.I.T.C. Investigation No. 337-TA-745. In that case, Motorola sought an exclusion order and permanent cease and desist order as a result of Apple's alleged infringement of the '697 and '223 patents, among other patents. In a decision issued August 24, 2012, the commission concluded that the accused Apple products did not infringe either the '697 or '223 patents. Dkt. #294-1 at 23, 47.

The '898, '559, '516, '712, '230 and '193 patents were all the subject of Apple Inc. v. Motorola Inc., Case No. 1:11-cv-8540 (N.D. Ill.), which was a case that originated in this court as 10-cv-662-bbc and was transferred to the Northern District of Illinois in December 2011.

Motorola voluntarily withdrew the '516 and '230 patents from suit. On summary judgment, the district court found that the '193 patent was invalid, that the '712 and '559 patents were not infringed and that Motorola could not prove the amount of damages to which it was entitled with respect to the '898 patent. Dkt. #320-3 (Order of Jan. 16, 2012 in Illinois case, finding '193 patent invalid and '712 patent not infringed); #320-4 (Order of Apr. 9, 2012 in Illinois case, finding claim 4 of '559 patent not infringed); #320-5 (Order of June 5, 2012 in Illinois case, finding claim 5 of '559 patent not infringed). The case was dismissed with prejudice on June 22, 2012. Apple, Inc. v. Motorola, Inc., 2012 WL 2376664 (N.D. Ill. June 22, 2012).

The parties have filed several motions in limine related to filings and decisions from the district court and International Trade Commission proceedings.

1. Apple's motion for judicial notice of public documents, dkt. #321, and Motorola's motion to exclude all evidence concerning prior litigation decisions, dkt. #292

As a threshold matter, both parties have filed motions regarding whether documents related to the International Trade Commission and Northern District of Illinois proceedings may be admitted for *any* purpose at trial. Motorola has moved under Fed. R. Evid. 402, 403 and 802 to exclude all evidence and argument related to these proceedings, contending that it would be irrelevant and inadmissible hearsay. Dkt. #292. Apple disagrees, and has moved for judicial notice under Fed. R. Evid. 201(b) of several filings and decisions related to those proceedings, as well as for judicial notice of documents from other patent infringement litigation involving the parties. Dkt. #321. Lopez Dec., Exhs. 1-45, dkt. ##322-1 to 323-28. Under Rule 201(b), “[t]he court may judicially notice a fact that is not subject to reasonable dispute because it: (1)

is generally known within the trial court's territorial jurisdiction; or (2) can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned." Fed. R. Evid. 201(b).

I am granting Apple's motion and denying Motorola's motion on this issue. The documents for which Apple seeks judicial notice fall into the following categories: (1) records of court proceedings and administrative agencies in which determinations were made regarding infringement and validity of Motorola's patents; (2) party filings in court proceedings; (3) patents and patent-related documents; (4) documents filed publicly with the Securities and Exchange Commission; and (5) interest and foreign exchange rates published by the Federal Reserve Board. These types of documents are appropriate for judicial notice: they are matters of judicial and public record and Motorola has not disputed their authenticity. General Electric Capital Corp. v. Lease Resolution Corp., 128 F.3d 1074, 1081 (7th Cir. 1997) ("The most frequent use of judicial notice of ascertainable facts is in noticing the contents of court records."); Opoka v. Immigration and Naturalization Services, 94 F.3d 392, 394 (7th Cir. 1996) ("[I]t is a well-settled principle that the decision of another court or agency, including the decision of an administrative law judge, is a proper subject of judicial notice."); Henson v. CSC Credit Services, 29 F.3d 280, 284 (7th Cir. 1994) ("district court may also take judicial notice of matters of public record").

Motorola's objections to these documents are not actually about whether the particular documents are the type that are generally appropriate for judicial notice. Instead, Motorola's arguments address the weight that should be given the conclusions or opinions expressed within the documents, rather than about the admissibility of the documents generally. However, I am

not taking judicial notice of the truth or accuracy of the facts, opinions or decisions contained within the documents. I am taking judicial notice that the contents of these documents are contained in the public record or were filed in related proceedings. Whether these documents have any persuasive or preclusive effect depends on the documents and purpose for which they are being presented.

2. Apple's motion to exclude evidence and argument that Motorola's patents ruled invalid or not infringed have value, dkt. #311

Whether Motorola's license offer to Apple was fair and nondiscriminatory depends on the value of Motorola's patent portfolio, and both parties intend to introduce expert testimony and other evidence on this issue. However, Apple has moved to preclude Motorola from offering evidence regarding the value of the patents in its declared standards-essential portfolio that have been adjudged invalid or not infringed by Apple in the Northern District of Illinois or the International Trade Commission. Apple contends that because these patents are either invalid or not infringed, they have no value and should not be considered when determining the value of a fair, reasonable and nondiscriminatory license.

In response, Motorola contends that the reasonableness of its 2.25% licensing offer to Apple must be evaluated in light of the information available at the time the offer was made. I agree. At the time Motorola made its initial 2.25% offer to Apple in August 2007, Motorola's patents were presumed valid and essential to cellular standards. 35 U.S.C. § 282 ("A patent shall be presumed valid."). As Apple's own experts have testified, the value of Motorola's declared-essential patents should be determined by an assessment of their value over any non-

infringing alternatives at the time Motorola's patents were incorporated into the standard. E.g., Carlton Rep., dkt. #208, ¶ 49. The invalidity and infringement decisions were issued by the International Trade Commission and the Northern District of Illinois nearly four years after Motorola's license demands and are not relevant or admissible to show that Motorola's license offers were unfair or discriminatory at any time before the decisions were issued.

It is a different question whether the decisions of the International Trade Commission and Northern District of Illinois are relevant to the *present* value of Motorola's standards-essential patent portfolio. If Apple prevails on its breach of contract claim and persuades the court that it is entitled to specific performance, the court will need to determine what constitutes a fair, reasonable and nondiscriminatory license to Motorola's standards-essential patents. I agree with Apple that the validity of Motorola's patents and whether Apple's products infringe them would be relevant in calculating the current fair license rate for purposes of specific performance.

This leaves the question whether the decisions by the Northern District of Illinois and the International Trade Commission on infringement and validity of certain of Motorola's patents have preclusive effect on this court's determination of the value of those patents. Apple contends that the decisions of these courts have preclusive effect under the doctrine of issue preclusion. The federal common law of issue preclusion applies if:

(1) the issue sought to be precluded must be the same as that involved in the prior action, (2) the issue must have been actually litigated, (3) the determination of the issue must have been essential to the final judgment, and (4) the party against whom estoppel is invoked must be fully represented in the prior action.

Washington Group Int'l, Inc. v. Bell, Boyd & Lloyd LLC, 383 F.3d 633, 636 (7th Cir. 2004)

I agree with Apple that Judge Posner's decisions in the Illinois case on the invalidity and

infringement of the '559, '712 and '193 patents are entitled to preclusive effect. All of the factors of issue preclusion are present. First, because the patents were found invalid or not infringed by Apple in the Illinois case, they are unnecessary to Apple's compliance with the relevant standards and therefore have no value to Apple. The second and third factors are met because the issue was actually litigated and the court's determination that the patents were invalid or not infringed was necessary to the court's final judgment dismissing Motorola's infringement claims on these patents. It does not matter that Motorola has appealed the judgment in Illinois. A final judgment for purposes of issue preclusion can include judgments at the district court level that are final and pending appeal. Old Republic Insurance Co. v. Chuhak & Tecson, P.C., 84 F.3d 998, 1000-01 (7th Cir. 1996). Finally, Motorola is the same party to both actions and was represented in the Illinois case. Accordingly, the '559, '712 and '193 patents should not be included as evidence of what value would constitute a current fair, reasonable and nondiscriminatory license to Motorola's standards-essential patents to Apple.

With respect to the decision by the International Trade Commission regarding infringement and validity of the '697 and '223 patents, the general rule is that determinations of patent infringement and validity by the International Trade Commission are not entitled to preclusive effect. Powertech Tech. Inc. v. Tessera, Inc., 660 F.3d 1301, 1308 (Fed. Cir. 2011); Texas Instruments Inc. v. Cypress Semiconductor Corp., 90 F.3d 1558, 1569 (Fed. Cir. 1996). Thus, the commission's decision alone would be insufficient to prove that Motorola's '697 and '223 patents lack value. However, findings by the commission can be considered by district courts for their persuasive value, so the parties may present evidence and argument at trial about whether the decision of the commission should affect the value of Motorola's standards-essential

patent portfolio and the calculation of a fair, reasonable and nondiscriminatory license rate. Texas Instruments, 90 F.3d at 1569 (“The district court can attribute whatever persuasive value to the prior ITC decision that it considers justified.”).

3. Apple’s Motion to exclude evidence and argument that Apple must satisfy a condition precedent to trigger Motorola’s obligation to license on fair, reasonable and nondiscriminatory terms, dkt. #312

At trial, Motorola intends to argue as a defense to Apple’s breach of contract claim that Apple failed to meet *Apple’s* obligations under the ETSI and IEEE policies to negotiate with Motorola as a condition to receiving a fair, reasonable and nondiscriminatory license. Apple has moved to preclude this line of argument, contending that it is barred by the doctrine of issue preclusion. Apple contends that Judge Posner decided in the Illinois case that Apple was not required to negotiate or make counteroffers as a condition to receiving a fair, reasonable and nondiscriminatory offer from Motorola.

In the Illinois patent infringement case, Judge Posner rejected Motorola’s argument that “Apple should lose the FRAND safe harbor” because Apple “refus[ed] to negotiate with [Motorola] after rejecting its initial offer of a 2.25 percent royalty.” Apple, Inc., 2012 WL 2376664, at *12. Judge Posner explained that:

Motorola agreed to license its standards-essential patents on FRAND terms as a *quid pro quo* for their being declared essential to the standard . . . It does not claim to have conditioned agreement on prospective licensees’ making counteroffers in license negotiations.

Id. He went on to explain that “[i]f Apple said no to 2.25 percent, it ran the risk of being ordered by a court to pay an equal or even higher royalty rate, but that is not the same thing as

Motorola's being excused from no longer having to comply with its FRAND obligations." Id.

I agree with Apple that the doctrine of issue preclusion applies to Judge Posner's conclusion that Motorola was required to give Apple a fair and nondiscriminatory license regardless whether Apple made counteroffers to Motorola. Judge Posner considered the same issue that is present in this case: whether Motorola's obligation to give a fair and nondiscriminatory license was dependent on Apple's refusal to negotiate by making counteroffers to Motorola's 2.25% demand. The issue was actually litigated and was necessary to Judge Posner's conclusion that Motorola was not entitled to injunctive relief on its patent infringement claim.

Motorola contends that issue preclusion should not apply because Judge Posner did not consider the particular contracts at issue in this case to evaluate whether Motorola had conditioned its licensing commitments on prospective licensees' willingness to make counteroffers and engage in negotiations. However, even if issue preclusion did not apply, Motorola points to nothing in either the ETSI or IEEE policies to support its argument that potential licensees must negotiate for a license and make counteroffers before Motorola's obligations are triggered, and my review of the contracts reveals no provisions supporting such a requirement. The District Court for the Western District of Washington reached a similar conclusion when considering Motorola's contracts with IEEE, holding that "it was not the intent of the contracting parties (Motorola and the IEEE/ITU) to require that [the] implementer of a standard first apply for a license and then negotiate for a license in good faith before Motorola's RAND obligations are triggered." Microsoft Corp. v. Motorola, Inc., C10-1823- JLR, 2012 WL 2030098 (W.D. Wash. June 6, 2012). The court explained that

[N]o words that would indicate the parties' conditional intent . . . are found in Motorola's Letters of Assurance to the IEEE. . . . Likewise, a finding that negotiating in good faith is condition precedent to Motorola's RAND obligations to the implementer would run contrary to the purpose of Motorola's commitments to the IEEE, [because it would allow Motorola to] preemptively request exorbitant compensation for its standard essential technology, and the implementer would be compelled to negotiate in good faith in response to the exorbitant demand.

Id. at *8-9. I agree with this reasoning. Motorola's contracts with ETSI and IEEE placed the burden of fair and nondiscriminatory licensing on Motorola, not on potential licensees. As Judge Posner explained, Motorola received an important benefit from the agreements by having its intellectual property rights incorporated into standards. Apple, Inc., 2012 WL 2376664, at *12 ("Motorola agreed to license its standards-essential patents on FRAND terms as a *quid pro quo* for their being declared essential to the standard.").

All that being said, Motorola raises an issue in its response to Apple's motion in limine to which neither party has given much attention in this case. Motorola points out that under ETSI's Intellectual Property Rights policies, it was entitled to condition its license offer to Apple on receiving a reciprocal license for Apple's standards-essential patents. The provision at issue states that members' commitments to license standards-essential patents on fair, reasonable and nondiscriminatory terms "may be made subject to the condition that those who seek licenses agree to reciprocate." Dkt. #288-3, Annex 6: ETSI Intellectual Property Rights Policy § 6.1.

This provision does not change my conclusion that Judge Posner's decision is entitled to preclusive effect on the issue whether Apple was required to make counteroffers and negotiate with respect to Motorola's 2.25% offer as a condition to Motorola's offering a fair, reasonable and nondiscriminatory license. However, this provision does suggest that Motorola cannot be found to have made an unreasonable or discriminatory offer simply because it demanded that

Apple provide a reciprocal license to Apple's standards-essential patents. Additionally, this provision suggests that Apple may have been required to engage in licensing negotiations related to its own patents. In other words, evidence that Apple refused to provide a license to its own patents or refused to engage in negotiations related to its own patents would be relevant to whether Motorola breached its contract with ETSI. Neither party has provided evidence or argument on this issue, so I cannot determine the significance of this provision at this stage. The parties should be prepared to address this issue at trial.

4. Whether Motorola breached its contracts by seeking an injunction in the Illinois case and an exclusionary order in the International Trade Commission proceeding, dkt. ##286, 310

In separate motions in limine, both parties have sought clarification about what constitutes a "breach" of Motorola's contracts with ETSI and IEEE. In particular, both seek the court's interpretation whether, as a matter of contract law, the ETSI and IEEE policies at issue in this case precluded Motorola from seeking injunctive relief to enforce its patent rights in its standards-essential patents.

In Apple's motion, dkt. #310, Apple asks the court to conclude that Motorola breached its contracts with ETSI and IEEE by seeking injunctive and exclusionary relief through patent infringement litigation. Apple argues that Motorola's commitments to ETSI and IEEE prohibit Motorola from bringing a suit to bar Apple from producing or selling products that incorporate Motorola's technology that is essential to ETSI or IEEE standards. Motorola objects to Apple's proposed interpretation of the contracts, contending that nothing in the language of its

commitments to ETSI and IEEE bars Motorola from seeking injunctive relief or exclusion orders. Dkt. #286. The threshold question is whether this issue was resolved by Judge Posner in the context of the parties' patent infringement case in the Northern District of Illinois. Apple contends that the parties litigated this issue and that Judge Posner concluded that Motorola's commitments to ETSI and IEEE barred it from seeking injunctive relief.

Judge Posner dismissed Motorola's claim for damages in the patent infringement case, concluding that Motorola had provided no evidence from which a fair, reasonable and nondiscriminatory royalty could be calculated. Apple, Inc., 2012 WL 2376664, at *11. He then considered whether Motorola could be entitled to injunctive relief on its infringement claims. Motorola presented arguments on the issue, contending that its commitments to standards-setting organizations should have no effect on the availability of injunctive relief. Dkt. #382-7 at 16-17 (Motorola's Br. in 11-cv-8540 (N.D. Ill)). Motorola argued that as a policy matter, if "Apple has no risk whatsoever of an injunction for any standards-essential patents, Apple would effectively have no incentive to ever engage in any good faith licensing negotiations regarding these standards based patents." Id. at 17. Motorola also argued that although ETSI used to have a rule barring injunctions, that rule was changed in 1994 and there was currently "no ETSI rule barring injunctions." Id. Finally, Motorola cited cases in which district courts had imposed injunctions for standards-essential patents. Id. (citing CSIRO v. Buffalo Tech. Inc., 492 F. Supp. 2d 600, 603-08 (E.D. Tex. 2007)).

Judge Posner rejected Motorola's argument, stating:

I don't see how, given FRAND, I would be justified in enjoining Apple from infringing the '898 [patent] unless Apple refuses to pay a royalty that meets the FRAND requirement. By committing to license its patents on FRAND terms, Motorola committed to license the '898 to anyone willing to pay a FRAND

royalty and thus implicitly acknowledged that a royalty is adequate compensation for a license to use that patent. How could it do otherwise? How could it be permitted to enjoin Apple from using an invention that it contends Apple *must* use if it wants to make a cell phone with UMTS telecommunications capability—without which it would not be a cell *phone*. . . Motorola agreed to license its standards-essential patents on FRAND terms as a quid pro quo for their being declared essential to the standard.

Apple, Inc., 2012 WL 2376664, at *12 (emphasis in original). See also id. at *13 (“A FRAND royalty would provide all the relief to which Motorola would be entitled if it proved infringement of the ‘898 patent, and thus it is not entitled to an injunction.”). Judge Posner’s conclusion was clear: Motorola’s request for injunctive relief was incompatible with its commitment to license its declared-essential patents in exchange for a fair, reasonable and nondiscriminatory license.

Apple argues that the only reasonable interpretation of Judge Posner’s decision is that Motorola breached its contracts with the standards-setting organizations by seeking an injunction. I disagree. Judge Posner’s decision did not resolve the contract issue now before this court. Although Judge Posner concluded that Motorola was not entitled to injunctive relief, he did not state explicitly that Motorola’s act of seeking injunctive relief constituted a *breach of its contract* with ETSI or IEEE. He did not purport to interpret the terms of the ETSI or IEEE contracts or make any rulings with respect to Motorola’s contractual obligations under the ETSI and IEEE policies. In fact, he never refers to the ETSI or IEEE policies as “contracts.” In dismissing Motorola’s claim for injunctive relief, Judge Posner cited policy and economic arguments, not contract provisions. Id. at *12.

It could be that Judge Posner believed Motorola was contractually barred from seeking injunctive relief. However, it also could be that he believed Motorola was barred by the equitable defenses of estoppel or waiver, or even that Motorola’s commitments created an

implied license that rendered moot any claim to injunctive relief. E.g. “Submission of the Office of Unfair Import Investigations on Remedy and the Public Interest,” filed on July 18, 2012, in In re Certain Wireless Communication Devices, Portable Music & Data Processing Devices, Computers & Components Thereof, Inv. No. 337-TA-745, 2012 WL 4840603 (existence of “RAND commitment” is “an affirmative defense” to patent infringement, not an “obligation preclud[ing] issuance of an exclusion order”); Doug Lichtman, Understanding the Rand Commitment, 47 Hous. L. Rev. 1023, 1043 (2010) (suggesting that licensing commitments to standards-setting organizations could be interpreted “as a public commitment that creates a defense of equitable estoppel” to patent infringement or as “creating an implied license, with the license rendering moot any claim to injunctive relief or triple damages, but leaving the court with the power to determine the royalty due”). It is simply not clear that Judge Posner relied on contract law in dismissing Motorola’s claim for injunctive relief. Thus, the doctrine of issue preclusion does not resolve the parties’ motions in limine.

Apple contends that even if issue preclusion does not apply, the court should interpret Motorola’s contracts with ETSI and IEEE as prohibiting Motorola from seeking an injunction or exclusionary order because any other interpretation would completely frustrate the policies underlying the standards-setting process’s insistence on licensing commitments. At least two courts have found this reasoning persuasive and have questioned whether injunctive relief is appropriate where a patent is encumbered by fair, reasonable and nondiscriminatory licensing obligations. E.g. Microsoft Corp. v. Motorola, Inc., Case No. 12-35352, —F.3d—, 2012 WL 4477215, *12 (9th Cir. Sept. 28, 2012) (“Implicit in such a sweeping promise [made by Motorola to standards-setting organizations] is, at least arguably, a guarantee that the

patent-holder will not take steps to keep would-be users from using the patented material, such as seeking an injunction, but will instead proffer licenses consistent with the commitment made . . . [I]njunctive relief against infringement is arguably a remedy inconsistent with th[at] licensing commitment.”); Realtek Semiconductor Corp. v. LSI Corp., Case No. C-12-03451-RMW, 2012 WL 4845628 (N.D. Cal. Oct. 10, 2012) (noting that in light of defendants’ obligations to license on fair and nondiscriminatory terms, “[t]he court is troubled by defendants’ decision to choose, in the first instance, a forum for enforcing their patent rights in which money damages are unavailable and the only relief is injunctive in nature”).

I agree with Apple that from a policy and economic standpoint, it makes sense that in most situations owners of declared-essential patents that have made licensing commitments to standards-setting organizations should be precluded from obtaining an injunction or exclusionary order that would bar a company from practicing the patents. Thus, it may be entirely appropriate for a court or the International Trade Commission to deny a request for an injunction or exclusionary order by a patent holder that has made commitments to offer a license on reasonable and nondiscriminatory terms. However, whether Motorola breached its contracts with ETSI and IEEE by seeking an injunction is a question that must be resolved using principles of contract law, not on the basis of economic policy or equitable principles.

When interpreting a contract, the court’s goal is to “ascertain the true intentions of the parties as expressed by the contractual language.” Town Bank v. City Real Estate Development, LLC, 2010 WI 134, ¶ 33, 330 Wis. 2d 340, 793 N.W. 2d 476. (At summary judgment, I applied Wisconsin law to Motorola’s contracts with IEEE and French law to the ETSI contracts. In their motions on limine, both parties cite Wisconsin contract law and do not argue that

French law is any different. I will apply general principles of Wisconsin contract law to interpret Motorola's commitments to both IEEE and ETSI.) Thus, in determining the meaning of Motorola's commitments to license its essential patents on fair, reasonable and nondiscriminatory terms, I must consider the policies of ETSI and IEEE as well as Motorola's written agreements with the organizations.

The parties cite only a couple of provisions as being relevant to the analysis of the parties' intent. With respect to IEEE, Section 6 of the IEEE's Intellectual Property Rights Policy requires members to submit letters of assurance including a commitment to license essential patents under reasonable and nondiscriminatory terms. Dkt. #148-26, § 6. Similarly, ETSI's Intellectual Property Rights Policy requires its members to use "reasonable endeavors" to inform the organization of essential patents "in a timely fashion," and asks members to grant irrevocable licenses to essential patents on fair, reasonable and nondiscriminatory terms. Dkt. #148-22, §§ 4.1, 6.1. The objectives of ETSI's policy are to insure that standards remain available for adoption by members of the industry and also to insure that holders of essential patents are able to receive adequate compensation from their innovations. Id. §§ 3.1, 3.2. The parties point to no other provisions in ETSI's or IEEE's policies relevant to Motorola's contractual obligations.

None of these provisions expressly precludes Motorola or any patent owner from pursuing an injunction or other relief as a remedy for infringement. Nonetheless, Apple contends that the court should infer that the contracts bar injunctive relief as a matter of contract law. However, it points to no provisions in the contract from which I could draw that inference. As I explained in a previous case, "a court's role in contract interpretation . . . is not to make contracts or to reform them, but to determine what the parties contracted to do; not

necessarily what they intended to agree to, but what, in a legal sense, they did agree to, as evidenced by the language they saw fit to use.” FPL Energy Point Beach, LLC v. Energy Resource of Australia Ltd., 565 F. Supp. 2d 999, 1004 (W.D. Wis. 2008) (quoting Miller v. Miller, 67 Wis. 2d 435, 441-42, 227 N.W.2d 626, 629 (1975)). There is no language in either the ETSI or IEEE contracts suggesting that Motorola and the standards-setting organizations intended or agreed to prohibit Motorola from seeking injunctive relief. In fact, both policies are silent on the question of injunctive relief. Moreover, in light of the fact that patent owners generally have the right to seek injunctive relief both in district courts, 35 U.S.C. § 283, and in the International Trade Commission, 19 U.S.C. § 1337(d), I conclude that any contract purportedly depriving a patent owner of that right should clearly do so. The contracts at issue are not clear. Therefore, I conclude that Motorola did not breach its contracts simply by requesting an injunction and exclusionary order in its patent infringement actions. I will deny Apple’s motion in limine on this issue.

I will also deny Motorola’s motion in limine on this issue. Motorola suggests in its motion in limine that there is *no* situation in which it could have breached its contracts by filing suit. However, Motorola does not respond to Apple’s argument that the contracts require Motorola to first offer a license to Apple on fair, reasonable and nondiscriminatory terms before filing suit. Because this argument was not addressed fully by either party, I cannot resolve it at this point.

C. Motions Related to Apple's Claim that Motorola Breached its Contracts with ETSI by Failing to Make Bona Fide Efforts to Disclose its Patents to ETSI in a Timely Manner

One of Apple's breach of contract claims remaining in this case is that Motorola breached its contracts with ETSI by failing to make "bona fide efforts" to disclose intellectual property rights in its '559, '697 and '898 patents to ETSI in a timely manner. In the August 10 summary judgment order, I granted Apple's motion for partial summary judgment on several issues of contract interpretation related to this claim, but noted that Apple would have to prove at trial that Motorola failed in fact to make bona fide efforts to disclose its patents to ETSI in a timely manner and that Apple was injured by Motorola's untimely disclosure. Dkt. #194 at 47. Both parties have filed motions in limine relevant to this untimely disclosure claim.

I. Motorola's motion to preclude evidence and argument relating to timeliness of patent disclosures to ETSI, dkt. #283

Motorola has moved to dismiss Apple's breach of contract claim based on ETSI's disclosure policy, arguing that there is no relief the court can grant Apple on that claim. First, Motorola argues that Apple did not request any declaratory or equitable remedy in its amended complaint for Motorola's alleged breach of ETSI's disclosure policy. Motorola argues that because Apple has reduced its damages claim to nominal damages, it makes no sense to resolve a claim for which Apple could receive no relief. Second, Motorola argues that Apple cannot prove that it suffered any harm from Motorola's alleged untimely disclosure of its essential patents.

I am denying the motion. Motorola's argument that Apple failed to plead a claim for declaratory or injunctive relief is simply incorrect. In its amended complaint, dkt. #110, Apple pleaded claims for breach of contract, equitable estoppel and patent misuse based on Motorola's untimely disclosure of intellectual property rights to ETSI and sought relief in the form of (1) an order that Motorola be estopped from enforcing its untimely disclosed intellectual property rights in the International Trade Commission or any other forum, id. at ¶ 197(a); (2) an order that Motorola be barred from seeking an injunction to prevent Apple from practicing certain standards, id. at ¶ 197(l); and (3) an order declaring that Motorola's essential intellectual property rights be declared unenforceable for patent misuse, id. at ¶ 197(m).

Additionally, Motorola's arguments about Apple's inability to prove that Motorola's alleged breach of the disclosure policy caused Apple any harm are nothing more than broad challenges to the weight of Apple's evidence. Although it would have been appropriate to challenge Apple's ability to prove breach of contract at the summary judgment stage, Motorola did not move for summary judgment on those grounds. Instead, Motorola argued only that Apple's claim was barred by the Noerr-Pennington doctrine. I rejected that argument and concluded that Apple could proceed with its breach of contract claims premised on Motorola's untimely disclosure of its intellectual property rights. Dkt. #194 at 28-29. Although I noted that it was "not clear how Apple intends to prove that it was damaged by Motorola's failure to disclose patents to ETSI in a timely manner," id. at 47, this was not an invitation for Motorola to file an untimely and undeveloped summary judgment motion in the form of a motion in limine. In its motion in limine, Motorola devotes only two paragraphs to its argument that Apple cannot prove that it suffered harm from Motorola's late disclosures, dkt. #284 at 5-6, and

fails to explain with any specificity why it believes Apple's evidence of injury is insufficient. Therefore, I will not bar Apple from presenting its nondisclosure case at trial.

2. Apple's motion to preclude Motorola from offering evidence or argument that it had a "process" for complying with ETSI's disclosure policies, dkt. #313

As discussed above, one of the issue remaining in this case is whether Motorola made "bona fide" efforts to comply with ETSI's disclosure policies. Motorola's position is that it had an internal process in place to insure compliance with the intellectual property rights disclosure policies of standards-setting organizations such as ETSI. However, Apple contends that Motorola should be precluded from introducing any evidence or argument about such a "process" because Motorola has continually invoked attorney-client privilege and refused to disclose any information about the process.

Motorola's arguments in opposition to Apple's motion are nonresponsive. Motorola argues that Apple is not entitled to an "adverse inference" that Motorola failed to make bona fide efforts simply because it invoked attorney-client privilege. However, Apple has not argued that it is entitled to an adverse inference. Apple argues only that Motorola should be precluded from introducing evidence at trial of a process that it has kept hidden from Apple.

I am granting the motion, with one exception. Motorola cannot introduce any evidence at trial regarding its process for disclosing intellectual property rights unless it made that information available to Apple during discovery. For example, although Motorola's 30(b)(6) witness invoked attorney-client privilege frequently during her deposition when asked about Motorola's disclosure procedures, she did provide some general information on the subject. E.g.,

Gordon Dep., dkt. #161, at 138-40; Gordon Dep., dkt. #250, at 143-50. Thus, Motorola may introduce information it provided during discovery but may not introduce any information to which it previously claimed privilege. Manning v. Buchan, 357 F. Supp. 2d 1036, 1048 (N.D. Ill. 2004) (“[W]hen a party asserts a privilege to preclude its opponent from obtaining information in discovery, it relinquishes the ability to use that information in its favor at trial.”).

D. Motions Related to Non-parties Chi Mei Communications Systems and Qualcomm

Among the claims I dismissed at summary judgment was Apple’s claim that Motorola tortiously and unlawfully interfered with a contract that Apple had entered into with Qualcomm in December 2009. Under that agreement, Apple and Qualcomm agreed to terms under which Apple could purchase chipsets that would be used in Apple’s products. The chipsets incorporated Motorola’s patented technology, and Motorola and Qualcomm had entered into a separate licensing agreement regarding the chipsets. Apple contended that Motorola committed the tort of interference with contract by terminating Qualcomm’s license and covenant rights with respect to Apple. I granted Motorola’s motion for summary judgment on that claim because Apple had failed to adduce any evidence that Motorola’s actions had disrupted performance of Apple’s contract with Qualcomm. Dkt. #194 at 31.

Although Apple’s tortious interference claim has been dismissed, the facts surrounding Motorola’s termination of Qualcomm’s licensing rights remain relevant to the case. Specifically, Apple pleaded a breach of contract theory premised on Motorola’s termination of the Qualcomm license, contending that Motorola’s selective termination violated its contractual obligations to

offer fair, reasonable and nondiscriminatory licenses to its patents. Apple's Am. Cpt., dkt. #110, ¶¶ 110-11.

In a related breach of contract theory, Apple also alleged in its amended complaint that Motorola unreasonably terminated an agreement it had with Chi Mei Communications Systems, another supplier of component parts for Apple, through which Apple had paid royalties of approximately \$1 for each phone for a license to certain of Motorola's standards-essential patents. *Id.* at ¶¶ 54-55. Shortly after Motorola terminated the Chi Mei license, Motorola sought a license rate from Apple of \$12 for each phone. At summary judgment, Motorola did not challenge Apple's ability to prove breach of contract on the basis of the Chi Mei and Qualcomm licenses.

Both parties have filed motions in limine regarding admissibility of evidence regarding these companies.

1. Motorola's motion to exclude any evidence and argument relating to non-parties Chi Mei Communication Systems and Qualcomm, dkt. #295

Motorola has moved to preclude Apple from offering evidence and argument at trial relating to Chi Mei and Qualcomm, arguing that Apple's breach of contract theories relating to these two companies are too "tenuous" to be asserted in this action and would "unnecessarily complicate the issues for trial." Dkt. #296 at 3. Specifically, Motorola argues that to resolve Apple's claims, the court would be required to interpret the contracts between Motorola, Chi Mei and Qualcomm and determine whether Apple qualifies as a third party beneficiary to those contracts, whether Motorola's actions were permitted under the contracts and whether

Motorola's actions breached Apple's alleged third party beneficiary rights in those contracts.

In response, Apple contends that its breach of contract claims do not depend on resolution of the issues identified by Motorola. Apple does not intend to debate at trial whether it was a third party beneficiary to the contracts between Motorola and Chi Mei or Qualcomm or whether Motorola breached some particular clause of its contracts with those companies. Instead, Apple contends that whether or not Motorola's actions were permitted under its contracts with those companies, its actions were unreasonable and discriminatory and constituted a breach of its contractual obligations to ETSI and IEEE to grant "irrevocable licenses on fair, reasonable and nondiscriminatory terms." Apple's Br., dkt. #376 at 2.

Apple's breach of contract theories premised on the Chi Mei and Qualcomm licenses may be flawed. Although Motorola's contracts with ETSI and IEEE required it to give Apple a fair, reasonable and nondiscriminatory license to its standards-essential patents, it is not clear that the contracts prohibited Motorola from altering its license agreements with Chi Mei and Qualcomm simply because Apple was benefiting from the licenses. Motorola's contracts with ETSI and IEEE required it to offer Apple a fair license, not to offer Apple a license through a third party. Unfortunately, this issue was not raised at summary judgment and the parties' briefing on the present motion in limine does not clarify the issue. Instead of addressing Apple's theories directly, Motorola attempts to avoid them by arguing that they are complicated and irrelevant. Without more evidence and argument from the parties on this issue, I cannot conclude that Apple's theories are unsupported by the contracts or the law. Moreover, I agree with Apple that at the very least, the Chi Mei and Qualcomm licenses are relevant to the reasonableness of Motorola's licensing demands. Therefore, I will not preclude Apple from

introducing evidence of the Chi Mei and Qualcomm licenses and of Motorola's actions in terminating them.

2. Apple's motion to preclude Motorola from offering evidence about why it purported to suspend its license with Chi Mei, dkt. #314

Apple contends that Motorola should be precluded from offering any evidence about the reasons why it suspended its license with Chi Mei in August 2007 because Motorola has continually asserted attorney-client privilege on this issue and has refused to provide any information to Apple regarding the suspension. Apple points to the depositions of Motorola's Rule 30(b)(6) witness, Ray Warren, in particular. On several occasions during his two depositions, Warren refused to answer questions about Motorola's termination of the Chi Mei license on the basis of privilege. E.g., Warren Dep., dkt. #162, at 179-180; Warren Dep., dkt. #268, at 132-33.

I agree with Apple that Motorola should not be permitted to submit evidence at trial about the particular reasons it terminated its license with Chi Mei, to the extent that Motorola refused to answer specific questions and provide specific information on that issue. However, Motorola did provide some general information during discovery regarding its relationship with Chi Mei and module licensing, through the testimony of Neill Taylor. E.g., Neill Taylor Dep., dkt. #158, at 139-142. Motorola may present any evidence on this issue at trial that it provided to Apple during discovery.

3. Apple's motion to preclude Motorola from arguing that its cellular standards-essential patent rights were not "exhausted" as to the first iPhone, dkt. #315

Apple has moved to preclude Motorola from arguing that its license agreement with Chi Mei did not "exhaust" its patent rights with respect to its standards-essential patents that were incorporated into Chi Mei's modules, or that the covenant-not-to-sue contained in the Chi Mei license did not apply to Apple. The doctrine of patent exhaustion provides "that the initial authorized sale of a patented item terminates all patent rights to that item." Quanta Computer, Inc. v. LG Electronics, Inc., 553 U.S. 617, 625 (2008). Under Apple's theory, because its iPhone was covered by Chi Mei's license with Motorola, Motorola could not sue Apple for patent infringement of the standards-essential patents covered by the license. Additionally, after Motorola suspended the license, Motorola could not sue Apple under a covenant-not-to-sue contained in the Chi Mei license.

Apple's motion is less a motion to preclude Motorola from presenting certain evidence than it is an opportunity for Apple to present a new theory based on the doctrine of patent exhaustion. Apple's amended complaint contained no suggestion that it was pursuing a patent exhaustion theory or that its breach of contract claims were related in any way to a covenant-not-to-sue provision in the Chi Mei license. Allowing Apple to raise this new theory on the eve of trial through a motion in limine would be highly prejudicial to Motorola. Therefore, I am denying the motion.

E. Motions Related to Expert Witness Reports and Testimony

Both parties disclosed several experts who have provided reports and who may testify at trial. Both parties have filed multiple motions seeking to exclude or limit the testimony of the opposing side's experts under Fed. R. Evid. 702 and Daubert v. Merrell Dow Pharmaceuticals, 509 U.S. 579 (1993). In assessing a motion to exclude testimony under Rule 702 and Daubert, the court must consider whether the proposed opinion witness (1) is qualified to offer opinion testimony under Rule 702, (2) has employed reliable methods, (3) proposes to offer opinions that follow rationally from the application of his "knowledge, skill, experience, training, or education" and (4) presents testimony on a matter that is relevant to the case at hand, and thus helpful to the trier of fact. Walker v. Soo Line R.R. Co., 208 F.3d 581, 586 (7th Cir. 2000). This evidentiary inquiry is meant to be flexible and fact specific, and a court should use, adapt or reject Daubert factors to accommodate the facts of a particular case. Kumho Tire Co. v. Carmichael, 526 U.S. 137, 141-42 (1999).

Before turning to the parties' specific motions and arguments, I note that because this case will be tried as a bench trial, there is less need to make Rule 702 admissibility determinations before the testimony is presented. "That is not to say that the scientific reliability requirement is lessened in such situations; the point is only that the court can hear the evidence and make its reliability determination during, rather than in advance of, trial." In re Salem, 465 F.3d 767, 777 (7th Cir. 2006). See also Metavante Corp. v. Emigrant Savings Bank, 619 F.3d 748, 760 (7th Cir. 2010) (observing that "the court in a bench trial need not make reliability determinations before evidence is presented"). Thus, I am not overly concerned about admitting expert opinions grounded on questionable methods or of limited significance. During

the trial, the parties will have the opportunity to question experts about their methods and make arguments about the flaws or limitations of the analyses and conclusions presented. If I determine at trial that an expert's testimony is not useful, I will put an end to the questioning. If I conclude later that any expert opinions that were admitted were unreliable, I will not consider them in making a decision. Still, it will be helpful to the parties to have rulings on their specific arguments about expert testimony, so I will address their motions.

1. Motorola's motion to preclude the testimony and opinions of Dr. Louis Berneman, dkt. #301

Motorola has moved to preclude Apple from introducing or relying on opinions from its expert Dr. Louis Berneman at trial. Motorola contends that Berneman's opinions do not meet the threshold requirements for admissibility under Rule 702 and Daubert because Berneman "admitted" that he did not apply proper and accepted methods for valuing Motorola's portfolio of standards-essential patents in reaching his conclusion that Motorola's 2.25% opening offer was unreasonable and discriminatory. Motorola's Br., dkt. #302, at 3. In particular, Motorola argues that Berneman failed to use analytical tools to determine the value of each patent in Motorola's portfolio.

Motorola misconstrues Berneman's deposition testimony. At his deposition, Berneman testified that there are two ways to value a standards-essential patent portfolio: (1) differential valuation, which requires using analytic tools that rate and rank the value of each individual patent in the portfolio; and (2) proportional valuation, which assigns equal value to all patents essential to a standard and thus uses the number of patents in the portfolio to approximate

portfolio value. Berneman Dep., dkt. #260, at 43-45. Berneman went on to explain that he did not attempt to value Motorola's individual patents using analytical tools because he applied "proportional valuation" to Motorola's patent portfolio. *Id.* at 49-50. He offered the opinion that proportional valuation was more appropriate in the standards-setting context. *Id.* at 43.

Motorola does not argue that proportional valuation is an unreliable method of valuing patent portfolios. Instead, it argues only that Berneman "admitted" that he failed to use appropriate methods by failing to use analytical tools in his valuation. Contrary to Motorola's assertions, Berneman did not testify that he had failed to use appropriate methods and he did not testify that it was necessary to use analytical tools and determine the value of each patent in Motorola's portfolio before a fair and nondiscriminatory license rate could be calculated. Therefore, Motorola has not identified any valid basis for excluding Berneman's testimony.

2. Motorola's motion to preclude the testimony and opinions of Dr. Dennis Carlton relating to licensing and market power, dkt. #304

Motorola has moved to preclude the testimony and opinions of Apple's expert, Dr. Dennis Carlton, regarding the reasonableness of Motorola's 2.25% license offer to Apple. Motorola contends that Dr. Carlton's opinions are unreliable and should be excluded under Rule 702 and *Daubert* for three reasons: (1) Dr. Carlton considered the value of only five of Motorola's patents and failed to analyze the remainder of Motorola's portfolio of standards-essential patents; (2) Dr. Carlton failed to undertake any independent analysis of Motorola's existing licensing agreements before concluding that Motorola's offer was discriminatory; and (3) Dr. Carlton's opinions relating to "market power" were relevant only to Apple's now-

dismissed antitrust and unfair competition claims.

With respect to Motorola's first argument, Motorola does not take issue with Carlton's general method for valuing patents in the standards-setting context. Both Carlton and Motorola's expert, Dr. Gregory Leonard, agree that a reasonable royalty for a declared-essential patent is a royalty that reflects the value of the patent over the next-best alternative available to the standards-setting organization before the standard was set. Carlton Rep., dkt. #208, ¶ 49; Leonard Rep., dkt. #209, ¶ 19. However, Motorola contends that Dr. Carlton's conclusions are flawed because he applied his method only to the specific patents Motorola asserted against Apple in patent infringement lawsuits and not to the "hundreds" of other patents Motorola also claims as essential to cellular and wireless standards.

Instead of considering the ex ante value of each patent in Motorola's portfolio, Dr. Carlton used as a benchmark for the value of Motorola's entire portfolio the rate Apple had paid Chi Mei of 93 cents on each iPhone for the rights to Motorola's declared-essential patents. Carlton Rep., dkt. #208, ¶¶ 55-60. To test the benchmark, Carlton considered whether the five specific patents Motorola was asserting against Apple (as of March 2012) had sufficient value to justify Motorola's attempt to charge Apple a rate twelve times what Apple had been paying Chi Mei, or approximately \$12.35 an iPhone. Id. at ¶¶ 55-56. Carlton concluded that the five patents represent only marginal improvements over alternatives that were available at the time the standards were being set and thus, Motorola's licensing demand was "inconsistent with the limited value of the [asserted] patents themselves." Id. at ¶ 56.

Motorola contends that in order to determine whether its license offers were reasonable and nondiscriminatory, Dr. Carlton was required to analyze and value Motorola's entire

portfolio of essential patents and any possible technological alternatives to those patents that existed before the relevant standards were adopted. However, Motorola cites no evidence or expert opinion in support of its criticism of the report or its assertion that it would be necessary or even possible to analyze each of its standards-essential patents to determine a reasonable royalty rate. Additionally, Motorola does not provide any specific criticism of Dr. Carlton's decision to use the Chi Mei rate and the incremental value of a few patents to evaluate Motorola's licensing offer to Apple. Without more specific challenges from Motorola, I cannot conclude that Dr. Carlton's opinions are unreliable.

Motorola's second argument is that Dr. Carlton's opinions are unreliable because he did not apply any analysis in identifying which license agreements would be comparable to a license between Apple and Motorola. Instead, Carlton relied wholly on the work of another Apple expert, Dr. Brian Napper.

By itself, the fact that Carlton relied on Dr. Napper's work in forming his own opinions is not a sufficient reason to exclude Carlton's opinions. Walker, 208 F.3d at 588 (observing that "courts frequently have pointed to an expert's reliance on the reports of others as an indication that their testimony is reliable"). See also Owens v. Ford Motor Co., 297 F. Supp. 2d 1099, 1108 (S.D. Ind. 2003) (testifying expert may rely on another expert's opinions); Ianopoulos v. Harvey L. Walner & Associates, Ltd., 866 F. Supp. 1086, 1095 (N.D. Ill. 1994) (same). However, "[e]xpert testimony relying on the opinions of others should, of course, be rejected if the testifying expert's opinion is too speculative . . . or the underlying basis is faulty." Walker, 208 F.3d at 588.

Motorola presents no persuasive reason for finding the work of Dr. Napper on which

Carlton relied was unreliable or faulty. Motorola criticizes Napper's September 14, 2011 report regarding "balancing payments," but there is no indication in Carlton's report that he relied on Napper's September 14 report. Motorola also criticizes Napper's March 1, 2012 report, a report on which Carlton did rely, for failing to "disclose with specificity the analysis or investigation" Napper undertook to determine licensees comparable to Apple. Motorola's Br., dkt. #305, at 7. However, Motorola fails to acknowledge that Napper's March 1 report includes a section titled "Determining the Licensees Comparable to Apple," in which Napper describes how he identified licensees that may be comparable to Apple's. Napper's Supp. Rep., dkt. #355, at 3-5 ("Determining the Licensees Comparable to Apple"). Because Motorola failed to address Napper's own description of his method, I cannot determine whether Napper's work is too "speculative" or "faulty" to provide a basis for Carlton's opinions.

Motorola's final argument is that Carlton's opinions on "market power" should be excluded because those opinions were relevant only to Apple's now-dismissed antitrust claims. Motorola does not identify particular opinions that it thinks should be precluded as irrelevant, arguing instead that the court should exclude all opinions included under the sections titled "Market Power Concerns with Collective Standards Setting" and "Motorola's Acquisition and Exercise of Market Power." The problem with this broad argument is that those two sections make up 28 of the 32 total pages of Carlton's report and include several opinions regarding issues that remain relevant in this case, including the potential for patent hold up and discrimination in standards-setting contexts, how licensing and disclosure obligations address those problems, Carlton's interpretation of "reasonable" and "nondiscriminatory" and his opinions as to whether Motorola complied with its licensing and disclosure obligations. Because

Motorola does not identify specific opinions that should be excluded, I will not preclude any opinions contained in those sections.

3. Motorola’s motion to exclude evidence or argument related to allegedly “non-infringing alternatives” to Motorola patents, dkt. #307

In their expert reports, Apple’s experts identified and analyzed potential alternatives to the technologies covered by five of Motorola’s declared-essential patents and concluded that Motorola’s technical proposals to the standards-setting organizations were competing with equally beneficial alternatives for inclusion in the relevant standards. Heegard Rep., dkt. #278, ¶ 7; Heegard Rep., dkt. #279, ¶¶ 76-79; Cimini Rep., dkt. #233, at ¶¶ 36, 39. Motorola has moved to preclude Apple from presenting any argument or evidence at trial related to alternatives to Motorola’s ‘516, ‘559 or ‘898 patents for three reasons: (1) Apple’s experts failed to consider whether the purported alternatives were covered by patents; (2) Dr. Heegard’s opinions about alternatives to the ‘559 patent are speculative; and (3) Dr. Cimini’s opinions about alternatives to the ‘898 patent rely on flawed methods.

Motorola’s first argument is that Apple’s experts’ conclusions regarding alternative technology are not reliable because they fail to address the costs associated with adopting an alternate technology, namely, the potential patent licensing fees that would have been paid to a third party whose alternate technology was adopted. The problem with this argument is that Motorola never explains why potential patent licensing fees are relevant to the purpose for which Apple’s experts analyzed the alternative technologies. Apple intends to use evidence of alternatives to establish a reasonable license rate for Motorola’s declared-essential patents, based

on the value of Motorola's patents before they were incorporated into standards. Apple says that the existence of alternatives that provide the same technical benefit as Motorola's proposals show that Motorola's patented proposals were "valueless" under an ex ante valuation analysis. Also, Apple contends that the existence of potential patent licensing fees on the purported alternatives is not relevant to the ex ante analysis. Motorola does not explain how potential patent licensing fees should have been incorporated into Apple's experts' analyses of ex ante valuation.

Motorola's second argument is that Dr. Heegard's opinions about non-infringing alternatives to the '559 patent are based on "unfounded speculation" about the standards-setting process. Motorola objects in particular to Heegard's statement that there are "many reasons why one proposal is chosen over another for inclusion in a standard," including "negotiations among participants," "compromise and 'horse trading.'" Id. at ¶ 13. Motorola argues that Heegard's suggestion that "negotiation" or "horse trading" influenced the inclusion of the '559 technology into the UMTS standard is based entirely on speculation because Heegard was not involved in developing the UMTS standard and has not even attended any ETSI working groups or meetings.

Motorola's criticisms of Heegard are more about the weight that should be given Heegard's opinions, not about the reliability of Heegard's methods or the usefulness of his report. As explained in his deposition, Heegard's opinions about negotiations and horse trading were based on his personal experience with standards-setting organizations generally. Heegard Dep., dkt. #264, at 150-51. Although Heegard has not participated in ETSI meetings and did not participate in development of the UMTS standard, he stated that he had "been involved in

quite a few different standards,” including some comparable to ETSI standards, and that in his experience, standards-setting necessarily involves negotiation and horse trading. Heegard Dep., dkt. #264, at 114. This is legitimate expert opinion. Fed. R. Evid. 702 (“A witness who is qualified as an expert by knowledge, skill, *experience*, training, or education may testify in the form of an opinion or otherwise . . .”) (emphasis added). Cf. Gayton v. McCoy, 593 F.3d 610, 619 (7th Cir. 2011) (“[A]n expert need not testify with complete certainty about the cause of an injury; rather he may testify that one factor could have been a contributing factor to a given outcome.”). If Motorola believes that Heegard’s opinions deserve less weight because of his lack of experience with ETSI and the UMTS standard in particular, Motorola is free to make that argument at trial.

Motorola’s final argument addresses Dr. Cimini’s opinions about alternatives to the ‘898 patent. Dr. Cimini gave the opinion that there were two alternatives to the ‘898 patent proposed by Nortel and Ericsson that ETSI could have adopted and that neither of those alternatives was covered by patents. Motorola contends that Dr. Cimini’s opinions should be excluded because he relied on flawed search parameters when searching for patents that might cover the two alternatives. Notably, Motorola does not contend that it looked for or discovered any patents that cover the two alternatives identified by Cimini. Instead, Motorola argues that Cimini should have looked harder and used different search terms. Additionally, Motorola argues that Cimini should have considered whether the Nortel alternative was covered by a Nortel patent that was filed more than one year *after* the alternative was published.

I am not persuaded that Cimini’s failure to consider the later-filed patent and his failure to search exhaustively for patents that may cover the Nortel and Ericsson alternatives are

sufficient reasons to preclude his opinions. As with Motorola's previous objections to Apple's experts' opinions, these objections are more about the weight that should be given Cimini's opinions than whether Cimini's opinions are reliable. Therefore, I am denying Motorola's motion in full.

4. Apple's motion to preclude evidence and argument regarding opinions on alternatives from Motorola's technical experts, dkt. #316

Apple contends that Motorola should be precluded from relying on its technical experts' analyses of potential alternatives to its standards-essential patents that existed at the time Motorola's patents were adopted into standards. First, Apple contends that any expert opinion regarding alternatives to the '223, '559 and '697 patents is irrelevant because those patents were found "worthless" in the related patent infringement suits in the International Trade Commission and Northern District of Illinois. As I explained already, evidence regarding the value of these three patents is relevant to whether Motorola's initial license offer to Apple was fair, reasonable and nondiscriminatory because that offer was made before the patents had been found invalid or not infringed. Apple makes no other argument about why this evidence should be precluded.

Second, Apple contends that Motorola's experts' testimony regarding potential alternatives to the '516 and '898 patents should be excluded because the experts failed to "quantify" the purported benefits that these patents had over potential alternatives. Apple criticizes Dr. Kevin Almeroth for not calculating how often the transmitter and receiver may lose synchronization under Apple's alleged ETS 300 alternative method. Apple's Br., dkt. #316 at

4-5. Apple criticizes Dr. Tim Williams for failing to calculate “how much faster the [‘898 patent system] can re-allocate resources or how much more data the system can handle by using the method of the ‘898 patent.” Id. at 5.

Apple does not explain why Dr. Almeroth or Dr. Williams was required to “quantify” the purported benefits of Motorola’s patents or make the specific calculations identified by Apple in order to comply with the requirements of Rule 702 and Daubert. Smith v. Ford Motor Co., 215 F.3d 713, 719 (7th Cir. 2000) (“[T]he Rule 702 test is a flexible one, and no single factor is either required in the analysis or dispositive as to its outcome.”). Apple cites an order issued by Judge Posner in the Illinois patent infringement case in which he excluded the testimony of Motorola’s damages expert, in part because she did not “quantify the benefit” to Apple of using the AT&T network over another carrier, such as Verizon. Apple, Inc., 2012 WL 1959560, *11. However, Apple does not explain why Judge Posner’s analysis of the testimony of a *damages* expert in the patent infringement case has any applicability to the opinions of the *technical* experts in this case. Both Dr. Almeroth and Dr. Williams provided detailed expert reports containing extensive descriptions of Motorola’s patents, as well as the possible alternatives. If Apple believes their reports are deficient, it may present evidence and argument at trial to undermine them. However, Apple has not shown that their testimony should be excluded under Rule 702. Michaels v. Mr. Heater, Inc., 411 F. Supp. 2d 992, 996 (W.D. Wis. 2006) (“Although defendants’ challenges to these experts’ qualifications are fodder for cross-examination at trial, they do not demonstrate that the opinions fail to meet the requirements of Fed. R. Evid. 702.”).

5. Apple’s motion to exclude Dr. Gregory Leonard from offering opinions on the correct fair, reasonable and nondiscriminatory royalty rate for Motorola’s declared standards-essential patents, dkt. #318, and opinions about “synergies,” dkt. #319

Apple contends that Motorola’s expert Dr. Leonard should not be permitted to testify or offer opinions as to what would constitute a fair, reasonable and nondiscriminatory royalty rate for a license of Motorola’s standards-essential patents because he did not disclose these opinions in his expert report or deposition testimony. Additionally, Apple contends that Dr. Leonard should be precluded from offering opinions that Motorola’s patented technology creates “synergies” with non-accused features of Apple’s products, making it appropriate for Motorola to seek a royalty based on the handset price of Apple’s products.

I am granting these motions in part and denying them in part. Motorola concedes that Dr. Leonard did not offer any opinion about what particular rate or range or rates would constitute a fair, reasonable and nondiscriminatory royalty. Motorola’s Resp. Br., dkt. #363, at 1. Therefore, he may not testify about a particular rate at trial. However, Dr. Leonard did offer opinions in his report and at his deposition about whether Motorola’s 2.25% offer was so unreasonable as to be a breach of Motorola’s contracts with ETSI and IEEE. Additionally, Dr. Leonard offered criticisms of the method used by Apple’s experts to calculate a particular rate and concluded that Apple’s experts failed to consider the overall value that Motorola’s technology added to Apple’s products. He may testify as to any of these opinions contained in his report. Although Apple challenges Dr. Leonard’s opinions as not being supported by the law of damages in patent infringement cases, this is not a patent infringement case. Moreover, neither party has cited any clearly established law regarding what factors may be considered in

determining a fair, reasonable and nondiscriminatory license rate in the standards-setting context. Under these circumstances, I conclude that it makes sense to hear what both sides' expert economists have to say on the subject. Apple's challenges may be appropriately pursued in cross-examination at trial.

6. Apple's motion to exclude Motorola's expert testimony not previously disclosed in a report, dkt. #317

Apple has moved to exclude Motorola from introducing expert testimony at trial that was not disclosed previously in expert reports. This motion is redundant of Apple's other motions regarding expert reports and is unnecessary. Further, Motorola "agrees that neither party should be ambushed at trial with expert opinions on which it did not have adequate notice." Motorola's Br., dkt. #365, at 1. If Apple believes at trial that Motorola is attempting to introduce opinions that were not disclosed previously, it may object to them at the appropriate time. This broad motion will be denied.

7. Motions regarding Apple's use of supplemental expert reports by Dr. Cimini and Dr. Napper

The parties filed three motions addressing Apple's use of supplemental expert reports. Motorola filed a motion to strike the August 14, 2012 supplemental report of Dr. Leonard Cimini, dkt. #218, and the August 23, 2012 supplemental report of Dr. Brian Napper, dkt. #229, while Apple filed a motion requesting leave to use the two supplemental reports at trial, dkt. #226.

a. Dr. Cimini's August 14, 2012 report

Expert reports were due in this case on March 6, 2012, with responsive reports due April 3, 2012. Dkt. #117. On March 6, 2012, Apple filed an initial report by Dr. Cimini, in which Cimini offered the opinion that there were at least two viable alternatives to the technology of the '898 patent that existed at the time the '898 patent was declared essential to ETSI standards and was incorporated into standards adopted by the 3G Project. The two alternative methods were documented in publications by Ericsson and Nortel and were termed "Contributions 75/95 and 99/96." Dkt. #233, ¶¶ 19, 24.

On August 14, 2012, Apple filed a supplement report, in which Cimini identifies two additional alternatives to the technology of the '898 patent. Dkt. #234. In particular, Cimini states that the 3G Project could have considered Contribution 239/97 and GSM 03.64 as alternatives. *Id.* at ¶ 6. Cimini's supplemental report relied on documents produced by AT&T on March 2, 2012, describing the functionality of base stations created by Ericsson and Nokia Siemens Networks. *Id.* at 11. The documents were produced in response to a subpoena that had been issued by Motorola to AT&T on February 8, 2012. AT&T later produced similar documents on March 30, 2012 in response to a subpoena served by Apple.

Motorola contends that Cimini's supplemental report should be stricken under Fed. R. Civ. P. 37(c) the ground that it was not timely disclosed as required by Rule 26(a) or (e) and it is prejudicial. In response (and in support of its motion to supplement), Apple contends that Cimini's supplemental report was a timely supplemental report under Rule 26(e) and this court's scheduling order, and that even if it was untimely, the delay was substantially justified and

caused no prejudice to Motorola.

Under the scheduling order in this case, Rule 26(e) supplementation to an expert report must be “limited to matters raised in an expert’s first report, must be in writing and must be served not later than five calendar days before the expert’s deposition. . . .” Dkt. #102 at 2.

Under Rule 37,

If a party fails to provide information or identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that information or witness to supply evidence on a motion, at a hearing, or at a trial, unless the failure was substantially justified or is harmless.

Fed. R. Civ. P. 37(c).

Apple contends that Cimini’s August 14 supplemental report complies with these rules because it was served nearly two weeks before his deposition was scheduled on August 31 and was limited to matters raised in his first report. In particular, Apple contends that both Cimini’s initial and supplemental reports focused on alternatives that the 3G Project could have used in place of the technology claimed in the ‘898 patent. The supplemental report merely elaborates on points he made in his original report.

Apple’s arguments are not persuasive. Although Cimini’s new report covers the same general topics as his original report, it includes significant new details. Rule 26(e) is intended to provide parties an opportunity to correct mistakes or oversights, not to include new examples and illustrations to bolster previous opinions. Innogenetics N.V. v. Abbott Laboratories, 2006 WL 6000791, *2 (W.D. Wis. 2006). Although Apple contends that the AT&T documents were not “available,” it does not suggest that its failure to discover the documents earlier was Motorola’s fault and it does not identify any particular reason why it could not have found the documents in time to include them in Cimini’s original report.

Additionally, Apple has not shown that its late supplementation is “substantially justified.” Apple received the information produced by AT&T and used by Cimini in his supplemental report on March 2, 2012, four days before Apple filed Cimini’s initial report in this case. Apple states that Cimini had finished his initial report on March 1, 2012, so that it could be filed in the related patent infringement case pending in the Northern District of Illinois, and that Cimini did not have time to update that report before the March 6 deadline in this case. That may be true, but Apple does not explain why it waited *more than five months* until August 14, 2012 to update Cimini’s report.

Instead of explaining its five-month delay, Apple argues that Motorola was not prejudiced by Cimini’s new opinions because Motorola has been aware of the AT&T documents since at least March 2, 2012 and questioned Cimini about the AT&T documents during his May 4, 2012 deposition in the Illinois case. I disagree. Although Motorola knew that Apple intended to rely on the AT&T documents in the Illinois case, it did not know that Apple would rely on those documents in this case. Motorola could have believed reasonably that Apple’s decision not to file a supplemental expert report in this case meant that Apple did not intend to rely on the documents.

Finally, Motorola’s expert did not prepare a response to Cimini’s supplemental opinion. If I allowed Apple to rely on the new opinion at trial, Motorola would have to devote resources to rebutting that opinion when it otherwise could be preparing for other aspects of trial. Motorola’s ability to prepare for trial should not be hampered in order to accommodate Apple’s untimely supplemental opinion.

In sum, because Apple has not shown that Cimini’s supplemental report is either justified

or harmless, I am denying Apple's motion to supplement, dkt. #226 and granting Motorola's motion to strike it. Dkt. #208.

b. Brian Napper's supplemental report

The parties also dispute whether Apple should be allowed to rely on the supplemental report of its damages expert, Brian Napper. Although the parties disagree about whether Apple's supplementation was proper, the more important question is why Apple needs to rely on this report at all. Apple has withdrawn its claim for damages over the amount of \$20 and has agreed to pursue only nominal damages, equitable remedies and declaratory relief at trial. Napper's supplemental report contains opinions about additional fees that Apple incurred in the International Trade Commission investigation and the Illinois case, but Apple has not explained why these opinions remain relevant. Therefore, I am denying Apple's motion to supplement, dkt. #226 and granting Motorola's motion to strike the report, dkt. #229.

ORDER

IT IS ORDERED that

1. Plaintiff Apple Inc.'s motion to preclude Defendant Motorola Mobility, Inc. from offering evidence or argument that it was entitled to seek injunctive relief or that it did not breach its contracts with ETSI and IEEE by doing so, dkt. #310, is DENIED.

2. Apple's motion to exclude evidence and argument that Motorola's patents ruled invalid or not infringed have value, dkt. #311, is GRANTED IN PART and DENIED IN PART. Prior decisions regarding validity and infringement of Motorola's declared-essential patents are

relevant to the current fair, reasonable and nondiscriminatory rate for Motorola's standards-essential patent portfolio, but are not relevant to Motorola's license offers made before the decisions were issued, as explained in this opinion.

3. Apple's motion to exclude evidence and argument that Apple must satisfy a condition precedent to trigger Motorola's licensing obligation, dkt. #312, is GRANTED.

4. Apple's motion to preclude Motorola from offering evidence or argument that it had a "process" for complying with standards-setting organizations' disclosure policies, dkt. #313, is GRANTED IN PART and DENIED IN PART. Motorola cannot introduce any evidence at trial regarding its process for disclosing intellectual property rights unless it made that information available to Apple during discovery.

5. Apple's motion to preclude Motorola from offering evidence about why it purported to suspend its license with Chi Mei, dkt. #314, is GRANTED IN PART and DENIED IN PART. Motorola may present any evidence on this issue at trial that it provided to Apple during discovery.

6. Apple's motion to preclude Motorola from arguing that its cellular standards-essential patent rights were not exhausted as to the first iPhone, dkt. #315, is DENIED.

7. Apple's motion to preclude evidence and argument regarding opinions on alternatives from Motorola's technical experts, dkt. #316, is DENIED.

8. Apple's motion to exclude certain Motorola expert testimony, dkt. #317, is DENIED.

9. Apple's motion to exclude Dr. Leonard from opining on the correct royalty rate for Motorola's declared standards-essential patents, dkt. #318, is GRANTED IN PART and DENIED IN PART. Dr. Leonard may not testify about a particular rate or range that qualifies

as a fair, reasonable and nondiscriminatory rate for Motorola's standards-essential patents, but may offer opinions about whether Motorola's 2.25% offer was a breach of Motorola's contracts with ETSI and IEEE. Additionally, Dr. Leonard may offer criticisms of the methods used by Apple's experts to calculate a particular rate.

10. Apple's motion to exclude testimony of Dr. Leonard relating to synergies, dkt. #319, is DENIED.

11. Apple's motion to take judicial notice of Exhibits 1-45, dkt. ##322, 323, to the Sept. 28, 2012 Declaration of Richard Anthony Lopez, dkt. #321, is GRANTED.

12. Apple's motion for leave to rely on supplemental expert reports, dkt. #226, is DENIED.

13. Motorola's motion to preclude Apple from seeking specific performance, dkt. #280, is DENIED.

14. Motorola's motion to preclude evidence and argument relating to timeliness of patent disclosures to ETSI, dkt. #283, is DENIED.

15. Motorola's motion to determine the terms of ETSI and IEEE policies, dkt. #286, is DENIED.

16. Motorola's motion to preclude evidence and argument arising after January 4, 2011, dkt. #289, is GRANTED IN PART and DENIED IN PART. Both parties are constrained by the explicit prohibitions of their non-disclosure agreements, but may introduce evidence arising after January 4, 2011 that is not expressly prohibited by those agreements.

17. Motorola's motion to exclude evidence and argument concerning prior litigation judicial decisions regarding the patents-in-suit, dkt. #292, is DENIED.

18. Motorola's motion to exclude evidence and argument relating to non-parties Chi Mei Communications Systems and Qualcomm, dkt. #295, is DENIED.

19. Motorola's motion to exclude evidence and references to irrelevant standards and standards-setting bodies, dkt. #298, is GRANTED IN PART AND DENIED IN PART. Apple is precluded from introducing testimony and evidence regarding standards that are not at issue in this case and standards-setting bodies other than ETSI and IEEE, and ETSI and IEEE standards that are not at issue in this case, unless Motorola opens the door to such evidence and argument.

20. Motorola's motion to preclude the testimony and opinions of Dr. Louis Berneman, dkt. #301, is DENIED.

21. Motorola's motion to preclude the testimony and opinions of Dr. Dennis Carlton, dkt. #304, is DENIED.

22. Motorola's motion to exclude evidence or argument related to allegedly "non-infringing alternatives" to Motorola patents, dkt. #307, is DENIED.

23. Motorola's motion to strike the supplemental expert report of Dr. Cimini, dkt. #218, is GRANTED.

24. Motorola's motion to strike the supplemental expert report of Dr. Brian Napper, dkt. #229, is GRANTED.

Entered this 29th day of October, 2012.

BY THE COURT:
/s/
BARBARA B. CRABB
District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

APPLE INC.

FINAL PRETRIAL CONFERENCE
ORDER

Plaintiff,

11-cv-178-bbc

v.

MOTOROLA MOBILITY, INC.

Defendant.

A final pretrial conference was held in this case on November 1, 2012 before United States District Judge Barbara B. Crabb. Plaintiff Apple Inc. appeared by Matt Powers, Jaron Raofield and Christine Saunders Haskett. Defendant appeared by Stephen Swedlow, Brian Cannon, Edward DeFranco, Chester Day and Lynn Stathas.

Counsel predicted that the case would take 8-9 days to try. They understand that trial days will begin at 9:00 and will run until 5:30, with at least an hour for lunch, a short break in the morning and another in the afternoon.

Counsel agreed that with the exception of experts and corporate representatives, all witnesses would be sequestered. Counsel are either familiar with the court's visual

presentation system or will make arrangements with the clerk for instruction on the system.

No later than 5:00 p.m. on November 2, 2012, plaintiff's counsel will advise defendant's counsel of the witnesses plaintiff will be calling on Monday and the order in which they will be called. Counsel should give similar advice at the end of each trial day; defendant's counsel shall have the same responsibility in advance of its case.

Counsel may have no more than 45 minutes for opening statements and should confine their statements to an explanation of what they expect the evidence will show. Arguments are to be reserved for the end of the trial.

Counsel should use the microphones at all times and address the bench with all objections. If counsel need to consult with one another, they should ask for permission to do so. Only the lawyer questioning a particular witness may raise objections to questions put to the witness by the opposing party and argue the objection.

NOTE: It is not necessary for counsel to provide copies of documentary evidence to the court until the end of trial. The exhibits that the parties introduce will be displayed on the exhibit monitor.

Counsel should know that matters that have been kept under seal during the pendency of this case, including exhibits, will be disclosed to the public to the extent they are the subject of testimony. The exhibits themselves will not be part of this court's record; counsel are responsible for their own exhibits.

NOTE: From this date forward, any documents filed with the court under seal must be accompanied by a document that has been redacted to remove only the truly confidential information. I will not review every document to be sure that this directive has been followed but will reserve the right to impose sanctions if any party uses redaction improperly, to hide information that it cannot persuade the court is covered by the protective order.

The parties agreed to present their primary deposition testimony in pared down form. Each deposition introduced will begin with a short running of the deposition so that the court can get a sense of the deponent and with a two-to three minute explanation by counsel about what the deposition will cover; the party's opponent may then have an opportunity to respond to the explanation and ask the court to read sections of the deposition it believes flesh out the portions identified by the other counsel. The court will read the portions of the depositions identified by the parties so that it will not be necessary to use in-court time to listen to them.

The parties are to advise the court when they intend to introduce evidence that is confidential so that the courtroom may be cleared. They anticipate that this will happen only rarely. In some cases, counsel will introduce evidence solely on the visual presenter without discussion but without the need to close the courtroom.

Counsel agreed to accommodate each other's scheduling problems by using Friday, November 9, 2012 for witnesses unable to appear during the following week. If there is a

witness who has started testifying and could finish his testimony and avoid staying in Madison for the three-day weekend, every effort will be made to get that testimony in as well.

Motorola's motion to strike the reports of David E. Culler and Steven W. McLaughlin is DENIED, but the reports may be used only as factual evidence about the prior litigation of the '516 patent and possibly as materials for cross examination. If Apple seeks to use the reports for the latter purpose, it must first clear the use with the court.

The parties are directed to revise their proposed special verdicts with a focus on the factual matters that the court must decide in order to answer each proposed question in the verdict. Proposing a general question is not helpful. What is helpful is to break the question down into questions about specific facts. For example, instead of asking "Was the driver negligent?" the questions can be framed in specifics, tracking the trial evidence: "Was the driver exceeding the speed limit at the time of the accident?" "Did the driver fail to signal his turn?" etc. In revising the verdicts, counsel should start with the goal of including every question they believe the court must answer in order to decide this case.

In addition, Apple is to revise its proposed special verdict by tying each question to a specific claim in the first amended complaint and explaining which remedy sought matches which claim and why.

In addition, the parties are to prune and supplement their proposed findings of fact

to exclude proposed facts that are no longer relevant and to identify every fact they intend to prove that bears on each question they want the court to answer. The revised special verdict forms and proposed findings of fact are to be filed with the court no later than noon on Wednesday, November 7, 2012.

Without reaching any resolution, the court and the parties discussed at length questions about the justiciability of the issues raised by Apple and the implications of the court's picking a specific FRAND rate, particularly in view of Apple's statement that it does not consider itself bound to accept any rate determined by the court.

Entered this 2d day of November, 2012.

BY THE COURT:

/s/

BARBARA B. CRABB

District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

APPLE, INC.,

Plaintiff,

v.

MOTOROLA MOBILITY, INC.,

Defendant.

OPINION and ORDER

11-cv-178-bbc

In an order entered October 29, 2012 resolving the parties' motions in limine, dkt. #424, I denied Motorola's motion to preclude Apple from seeking specific performance. Id. at 7-11. In its amended complaint, Apple had requested "[a]n order ordering Motorola to specifically perform its contractual commitment to license its essential patents on F/RAND terms." Dkt. #110 at ¶ 197(h). From this request for relief, I understood Apple to be requesting an order requiring Motorola to offer a license for its standards-essential patents to Apple and to be representing that Apple was ready and willing to accept such a license, or at least that Apple would be bound by the license rate set by the court for Motorola's standards-essential patents. In denying Motorola's motion in limine, I stated that "specific performance *may* be an appropriate remedy under the circumstances of this case" because

[u]nless and until Motorola gives Apple a fair license to its declared-essential patents, Apple will continue to face the threat of patent infringement litigation from Motorola. It would be highly inefficient to require Apple to bring a new lawsuit for monetary damages or declaratory relief each time Motorola sues it for patent infringement. Additionally, it makes little sense to order the parties to continue negotiating a license when they have been unable to reach an agreement

through five years of negotiations.

Dkt. #424 at 8.

Since issuing the October 29 order, it has become clear that Apple's interest in a license is qualified. In its response to Motorola's motion for clarification on the specific performance issue, Apple states that it will not commit to be bound by any FRAND rate determined by the court and will not agree to accept any license from Motorola unless the court sets a rate of \$1 or less for each Apple phone. Apple's Resp. Br., dkt. #448 at 8. In other words, if Apple is unsatisfied with the rate chosen by the court, it "reserves the right to refuse and proceed to further infringement litigation." *Id.* at 2. Despite its position, Apple maintains that it is entitled to specific performance in the form of the court determining what a FRAND rate is for Motorola's patents. At the final pretrial conference, I asked Apple to explain why it believed the court should determine a FRAND rate even though the rate may not resolve the parties' licensing or infringement disputes. I questioned whether it was appropriate for a court to undertake the complex task of determining a FRAND rate if the end result would be simply a suggestion that could be used later as a bargaining chip between the parties. Apple responded that the rate would resolve the dispute in this particular case, namely, whether Motorola's license offer was FRAND and if not, what the rate should have been.

Apple's response was not satisfactory and did not assuage my concerns about determining a FRAND rate that may be used solely as a negotiating tool between the parties. After further consideration, I believe it would be inappropriate to grant Apple's clarified request for specific performance. As I explained in the October 29 order, the normal remedy for a breach of contract is an award of damages, while specific performance is an "exceptional" remedy. Dkt.

#424 at 8. It may have been appropriate to order exceptional relief in this case if it would have prevented continued patent infringement litigation or protracted negotiations. However, it is now clear that specific performance would not resolve those concerns.

Moreover, because specific performance is a request for equitable relief in the form of a “positive injunction,” Chicago United Industries, Ltd. v. City of Chicago, 445 F.3d 940, 945 (7th Cir. 2006), a party requesting specific performance must satisfy the four-factor test set forth in eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391 (2006). This test applies to requests for injunctive relief in federal court, regardless whether the underlying claim is premised on patent law, federal statutory law or state law. E.g., Sierra Forest Legacy v. Sherman, 646 F.3d 1161, 1184 (9th Cir. 2011) (stating “[e]ven in [National Environmental Policy Act] cases,[a]n injunction should issue only if the traditional four-factor test is satisfied”) (citation omitted); Kartman v. State Farm Mutual Automobile Insurance Co., 634 F.3d 883, 886, 892 (7th Cir. 2011) (using four-factor eBay test to analyze whether proposed class of plaintiffs might obtain injunction for claims originally brought in state court alleging breach of contract, bad-faith denial of insurance benefits and unjust enrichment); e360 Insight v. Spamhaus Project, 500 F.3d 594, 596, 604 (7th Cir. 2007) (citing eBay in support of “conclu[sion] that a more substantial inquiry . . . was necessary prior to the entry of equitable relief” for various torts). Under eBay, a plaintiff seeking an injunction must show:

(1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.

eBay Inc., 547 U.S. at 391.

Apple's request for a FRAND rate that may or may not resolve the licensing and infringement disputes between the parties and would likely be used simply as a starting point for future negotiations does not satisfy these basic requirements for an injunction. First, Apple has not shown that it would suffer irreparable harm without its requested relief. In its trial brief, Apple's only allegation of irreparable harm is that Motorola has sued it for patent infringement and has sought to enjoin or exclude Apple from selling its products in the United States. Apple contends that if its products were enjoined or excluded from the United States, it would suffer lost profits, loss of potential customers, loss of goodwill and other irreparable harm.

Apple's allegations of "irreparable harm" have at least two problems. The first problem is that Apple's request for specific performance in the form of court declaration of a FRAND rate without any obligation by Apple to accept the rate would not prevent Motorola from suing Apple for patent infringement and requesting injunctive relief. In other words, if Apple refuses to be bound by the rate determined by the court, Motorola could continue to sue Apple for patent infringement and request injunctive relief.

The second problem is that Apple has provided no reason why its injuries would not be remedied by an award of money damages. It is undisputed that Motorola has failed to obtain any exclusion order or permanent injunction against Apple in the related patent infringement proceedings. Further, although Apple suggests that it will continue to face threats of permanent injunction or exclusionary orders related to Motorola's standards-essential patents, it is not clear why this would be so if this court had resolved Apple's claim for money damages in its favor. If Apple had been awarded money damages in this case, the court would have necessarily determined that Motorola breached a contract by failing to offer Apple a FRAND rate. Under

such circumstances, Apple would have an obvious defense in any future proceeding in which Motorola sought an injunction or exclusionary order against Apple.

With respect to the remaining eBay factors, I am particularly convinced that the public interest factor weighs against granting Apple's request for specific performance in this case. As I explained at the final pretrial conference, courts are not in the best position to determine a FRAND rate for a portfolio consisting of hundreds of patents that would be used later in licensing negotiations between two highly sophisticated parties. Both parties in this case employ licensing experts whose job it is to negotiate these types of licenses and who are in a much better position than the court to determine a FRAND rate. Apple's request that the court determine the FRAND rate places an enormous and possibly unjustifiable burden on the judiciary's resources. In light of this reality, it would not be in the public interest for the court to spend such enormous resources to determine a FRAND rate that may ultimately lead only to additional litigation and would set a troubling precedent for future cases involving FRAND commitments. As the Court of Appeals for the Seventh Circuit has said, courts should consider the practicality of a requested injunction and "as a practical matter, . . . what purpose would be served by" a proposed injunction. Kartman, 634 F.3d at 893.

Finally, although Apple suggested at the final pretrial conference that this court could determine a FRAND rate as part of Apple's request for declaratory relief, regardless of the requirements for seeking specific performance, it would be inappropriate to "declare" a FRAND rate for the same reasons explained above. The decision whether to grant declaratory relief is discretionary, 28 U.S.C. § 2201(a) (courts "may" issue declaratory judgments), and it is inappropriate to issue declaratory judgment if "such a judgment would have no practical effect." Apple, Inc. v. Motorola, Inc., Case No. 1:11-CV-08540, 2012 WL 2376664, *23 (N.D. Ill. June

22, 2012).

In light of these observations, I am prepared to conclude that the court will not “declare” a specific FRAND rate for Motorola’s standards-essential patents. This would mean that, with respect to Apple’s breach of contract claim arising from Motorola’s FRAND commitments, the trial would resolve only the issue whether Motorola’s 2.25% licensing offer and subsequent negotiations complied with its FRAND obligations. However, this leads to an obvious question: what purpose would be served by the court’s declaring that Motorola’s actions constituted a breach of its FRAND contracts? Such a declaration would lead to the same situation as a declaration of a particular FRAND rate; the parties would be sent back to the negotiation table to hammer out the details of a license. Further, although a declaration might be useful for Apple as a defense to a future patent infringement suit brought by Motorola, Apple has not shown at this point that future patent infringement suits are likely or that it would be appropriate to declare that Motorola breached its contracts simply to provide Apple a defense in hypothetical future infringement actions. This leads to the question whether any trial should be held on Apple’s breach of contract claim relating to the FRAND contracts.

Additionally, these observations lead to the question whether a trial should be held regarding Apple’s other claims. Along with its claim that Motorola breached its FRAND commitments, Apple is asserting claims that Motorola violated disclosure obligations to ETSI and engaged in patent misuse. Apple is seeking extraordinary equitable and declaratory remedies on these claims, including an order rendering Motorola’s patents unenforceable against Apple. However, its allegations of irreparable harm and its arguments about the insufficiency of monetary damages focus on the possibility that Motorola may sue Apple for infringement and

seek an exclusionary order against Apple in the future. Apple's Trial Br., dkt. #465, at 35, 52. As explained above, Apple has not explained why money damages would not be a more appropriate and adequate remedy, and in particular, why Apple believes that Motorola could obtain an injunction or exclusionary order against it after this court had determined that Motorola had injured Apple by breaching its duty to disclose its patents to ETSI.

Before making any final decisions on these issues, I will give the parties an opportunity to respond to the concerns raised in this order. I understand that the parties are working hard to prepare for the trial at this point and it is unfortunate that these issues were not raised earlier in this case so that they could have been resolved before the eve of trial. However, they need resolution and I am confident the parties will be able to respond promptly. Therefore, the parties may have until Sunday, November 4, 2012 at 12:00 p.m. to respond to this order. The parties should be prepared to discuss these issues on Monday morning at 9:00 a.m.

At this point I cannot say that I will be able to make a final decision on Monday morning so the parties should be prepared to commence the trial at 1:00 after discussion of these issues.

Entered this 2d day of November, 2012.

BY THE COURT:

/s/

BARBARA B. CRABB

District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

APPLE INC.,

Plaintiff,

v.

MOTOROLA MOBILITY, INC.,

Defendant.

OPINION AND ORDER

11-cv-178-bbc

In a statement from the bench on November 5, 2012, following a hearing with the parties, I advised them in general terms why I was dismissing plaintiff Apple Inc.'s remaining claims against defendant Motorola Mobility, Inc. This order is intended to explain in more detail why I have determined that Apple's claims for relief in the form of nominal damages, specific performance and declaratory judgment cannot succeed. Apple has not shown either that it has a right to the relief that it is seeking or because that the discretionary relief it requests would have any practical effect.

Some background may be helpful to non-parties' understanding of the dispute and the reasons for its dismissal. Apple and Motorola are competitors in the wireless communications industry. Motorola owns a number of patents that it has declared to be patents essential to various technological standards set by international standard setting organizations relevant to wireless communication devices. The standard setting

organizations consist of technology representatives from companies interested in determining standards for a particular aspect of technology; their purpose is to agree on common technological standards to enable all compliant products to work together. Often the agreed upon standard will cover technology that is the subject of a patent; in that case, the patent becomes an “essential patent.” The standard setting organizations have developed policies for this situation in an effort to prevent patent holders from abusing the market power that flows from owning technology that has become a standard. They encourage members to make known to the organization patents essential to a proposed standard and to agree to license those patents on fair, reasonable and non-discriminatory terms to anyone who asks for a license. (Such terms are referred to in the industry as “FRAND” terms.) Motorola has many patents in the cellular communication industry, some of which it has disclosed to various standard setting organizations. It has assured the organizations that these patents will be made available to competitors under “reasonable terms and conditions that are demonstrably free of any unfair discrimination.”

This suit began as part of an infringement action that Motorola filed against Apple in the International Trade Commission. After the case had been pending for a few months, Apple filed counterclaims against Motorola and removed the counterclaims to this court on March 11, 2011. It sought preliminary injunctive relief against Motorola; that motion was denied. Dkt. #85. Motorola sought dismissal of the action; that motion was denied as well, with one inconsequential exception. Dkt. #93. On September 16, 2011, Apple filed an amended complaint, alleging ten claims for relief, dkt. #110, all variants of its primary

claims that Motorola was bound by its contracts with these standard setting organizations. Under those contracts, it had an obligation both to disclose to the organizations any patents it owned that would be covered by standards adopted by the organizations and to offer licenses to those patents to competitors under terms that were fair, reasonable and non-discriminatory. Apple contended that it was a third party beneficiary of these contracts and thus entitled to damages for Motorola's breach of contract and inequitable conduct; specific performance of Motorola's contractual commitment to license its standards-essential patents on FRAND terms; and declaratory relief, specifically, judgments declaring that Motorola had breached its contracts, that the terms it had offered Apple to license patents were not FRAND terms and that Motorola was not entitled to seek injunctive relief preventing Apple from practicing certain standards. Apple alleged other claims on which it sought injunctive relief and damages but those claims were dismissed earlier and are no longer before the court.

In deciding the parties' cross motions for summary judgment, I found in favor of Apple on its claims that it was a third party beneficiary of the contracts between Motorola and the standards setting organizations, that the contracts bound Motorola to disclose its intellectual property rights in a timely manner and that Motorola had failed to make the disclosures before the adoption of the standards incorporating its patents. Order, dkt. #194, at 3. I found also that Motorola had failed to show that Apple's breach of contract or estoppel claims should be dismissed for Apple's failure to prove that it had suffered any compensable damages. Id.

On September 24, 2012, Apple dropped its claim for money damages on any

remaining claims, asking only for nominal damages of less than \$20. With only its claims for specific performance and declaratory relief remaining, it requested a court trial. Dkt. #255. The request was granted.

In preparation for a November 5, 2012 trial, the parties filed motions in limine that revealed considerable disagreement about the scope of the trial. Apple anticipated that the trial would result in a determination of a specific rate or range that would qualify as a fair, reasonable and non-discriminatory rate for a license to Motorola's essential patents and an order requiring Motorola to offer that license. Motorola argued for a determination limited to the question whether its initial royalty offer of 2.25% was fair, reasonable and non-discriminatory and whether it had failed to negotiate in good faith. It pointed out that a victory for Apple would mean nothing more than nominal damages and possibly an order from the court to negotiate a license. At the time, Motorola's argument did not seem persuasive. It appeared possible that specific performance would be an appropriate remedy if Apple proved that Motorola had breached its contracts with the standard setting organizations. I anticipated that the court would decide, first, whether Motorola had breached its contractual obligation by failing to offer a fair, reasonable and non-discriminatory rate for a license, which would require determining just what such rate would be or at least what the proper range of such a rate would be, and second, whether Motorola should be required to license its patents to Apple on those terms.

An order to this effect issued on October 29, 2012. The next day, Motorola moved for clarification, arguing that if the court determined a fair, reasonable and non-

discriminatory rate, Apple should be required to accept a license to Motorola's essential patents and pay the license fee for all accused devices. Dkt. #444. Apple responded on October 31, making clear its opposition to the suggestion that it agree to be bound by any rate determined by the court. Apple's Br., dkt. #448, at 1 ("Motorola's commitment to standard-setting organizations to offer a FRAND rate does not bind Apple to write a blank check and accept that offer.") Although Apple wanted the court to determine a fair, reasonable and non-discriminatory rate that Motorola must offer to Apple, it maintained that Motorola had never asked the court for an order requiring Apple to accept this rate. Rather, Apple argued, the case had always focused on Motorola's obligation to offer a fair, reasonable and non-discriminatory license to Apple. Id. at 4. It added, however, that it would be willing to pay a rate of no more than \$1 for each Apple device going forward, while it retained the right to appeal any award higher than \$1, as well as to refuse any such rate and proceed to further infringement litigation. Id. at 5.

Perhaps it should have been evident earlier in the case that Apple was seeking only a ceiling on the potential license rate that it could use for negotiating purposes, but it was not. This became clear only when Apple informed the court in its October 31 response that it did not intend to be bound by any rate that the court determined. This meant that the court would determine what it believed to be a fair, reasonable and non-discriminatory rate for a license with Motorola, but Apple would pay that rate only if it was the rate Apple wanted. Even then, it was only volunteering to pay the rate. If Apple succeeded in showing that a breach occurred but did not win the rate it wanted, it could walk away, leaving

Motorola without a mechanism for obtaining compensation from Apple for the use of its patents except by filing infringement suits. The court would be resolving all of the issues raised in this case without necessarily bringing the parties any closer to a license agreement. In effect, Apple was asking the court to assist it in negotiating, not in putting the parties' dispute to rest.

At the final pretrial conference on November 1, 2012, I advised the parties that it was doubtful whether the case would proceed to trial on November 5, as scheduled, because of the court's uncertainty over the propriety of engaging in the complex task of determining a FRAND rate if the end result would not resolve the parties' disputes over licensing and infringement. In an order entered the next day, November 2, I elaborated on these questions, asking in effect whether the relief sought by Apple would actually resolve any dispute between the parties. The parties were given until Sunday to file briefs in response, with a hearing to follow on Monday morning and the trial continued until 1:00 p.m.

Apple came back with three suggestions: First, the trial could proceed as previously scheduled and on the same terms as the court had determined in the order deciding the motions in limine. Second, the trial could go forward as scheduled on the understanding that the court would determine a FRAND rate under a method the court would construct for determining patent value and both parties would agree that the method would be binding on them. In other words, Motorola would have to agree that any valuation method the court determined would apply to Motorola's and Apple's patents. Presumably, it would follow that Apple would be entitled to credit or compensation on the license fee for this value

because Motorola would be gaining a cross-license to Apple's patents. Third, if Motorola would not agree to be bound by a valuation method adopted by the court, the trial would be continued for six to nine months to allow the development of a record as to both parties' essential patents so that the court could determine in one proceeding what the FRAND rate would be, with both parties agreeing to be bound by the court's determination. Apple's Resp., dkt. #497, at 2-3. Apple told the court that if it adopted this third proposal and agreed to determine the value of Apple's patents as well as Motorola's, Apple would agree to be bound by the determination. Id.

The parties discussed these options at the Monday hearing. As for option one, Apple made no persuasive arguments about why the case should proceed under its original conception of the trial, with the court determining a non-binding FRAND rate for Motorola's standard-essential patents. With respect to its breach of contract claim, the only relief to which Apple would be entitled if it prevailed would be damages, which it has foresworn, or specific performance, which it has not shown is warranted in these circumstances. As I explained in the November 2 order, not only has Apple failed to show that it can satisfy the four-factor test for equitable relief set forth in eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391 (2006), it makes no sense for Apple to ask for this relief when it is obvious that there can be no real performance by either side until all of the terms of the contract are negotiated.

Apple argued at the hearing that the trial could proceed under option one because it is asking the court simply to order specific performance that would "complete the circle" of

the contract that Motorola entered into with the standard setting organizations. However, Apple has not cited any authority for this proposition and it has never explained why an order that did no more than “complete a circle” would justify an order of specific performance.

Additionally, Apple has made the argument that the trial should proceed under option one on its breach of contract claims because it is entitled to nominal damages, but it has not cited a case in which a court allowed a party to proceed to trial on a claim for nominal damages. The cases it has cited all arose in situations in which the party seeking damages had failed to prove damages at trial or the court had concluded that the determination of damages was too difficult. Olympia Hotels Corp. v. Johnson Wax Development Corp., 908 F.2d 1363, 1372 (7th Cir. 1990); Felton v. Teel Plastics, 724 F. Supp. 2d 941, 954 (W.D. Wis. 2010). The fact is that the request for nominal damages in this case is just another way of asking for declaratory relief and, as explained in the November 1, 2012 order, dkt. #487, it is improper to order declaratory relief when it would have no practical effect.

Apple attempted to address the problems with option one through its two new proposals. Under option two, the trial would go forward as scheduled with the court determining a method for valuing each party’s standards essential patents and assessing a fair, reasonable and non-discriminatory rate for a license or an offer of one. Motorola expressed strong resistance to option two, making the obvious objection that the question of the value of Apple’s patents had never come up before because Motorola had never asserted a claim involving these patents. Therefore, Apple was asking the court to construct

a method for determining the value of both parties' patents to each other, except that the court would not know anything about Apple's patents. Not only was Apple expecting the court to create an evaluation method without all of the information it needed, but it was asking the court to create a one-size-fits-all-evaluation method that might bind other patent holders who have nothing in common with either Apple or Motorola.

In response, Apple argued that a patent-by-patent analysis of all of the standard-essential patents was not necessary to because the court could rely on a "percentage of intellectual property rights" approach. Each party would identify the number of patents it has declared to be essential to the relevant standards. The court would then compute a percentage derived from the number of the party's own patents to the number that have been declared essential and apply that percentage to the cost of the chip or to the board, depending on which part the court determined was the smallest saleable unit that used the technology providing all the cellular functionality covered by the patents.

Alternatively, Apple argued, the court could determine a FRAND rate by looking at the licensor's own licensing history, but it acknowledged that this approach would not carry over to a determination of a FRAND rate for any other patent holder's portfolio. As a third alternative, it suggested that the court could rely simply on Motorola's history with a Chinese company to which it had licensed its technology in the past. Again, this alternative would not assist the court in deciding the value of Apple's own patents. As Motorola noted, the proposals are a good illustration of the idiosyncratic variances of negotiations over patent valuation. Hrg. trans., dkt. #500, at 21-22.

From the arguments that Apple made, it is not realistic to think that a court could construct a “method” into which the parties could insert numbers to produce a fair valuation of a company’s patent portfolio in a given area of technology. It is no more realistic to think that this court could arrive at a fair valuation of the Apple patents simply by applying the percentage of intellectual property rights approach that Apple has suggested. Each proposal exposes more of the difficulties inherent in trying to pick a particular monetary rate for an agreement as complex as a licencing fee for rapidly changing technology. Apple has not explained how it is possible to determine a rate without knowing the answers to such questions as how a cross-license to the other party’s patents may affect that rate or what the scope of the license is (a worldwide license will be more valuable than a license to sell in only one country or only a few countries); what guarantees are incorporated into the agreement; the length of the agreement; or the frequency of payments. In effect, Apple is asking the court to assess one part of a complex contract that has yet to be negotiated.

This leaves option three, which was Apple’s request to continue the trial for six to nine months. Even if option three were adopted and the trial were continued to allow the parties to litigate the value of Apple’s patents, the trial would not resolve all of the matters that have to be considered before the parties can agree upon a license fee. There is no guarantee that the parties will complete the negotiation and actually enter into a licensing agreement under which Apple will pay Motorola for the use of its technology. In these circumstances, I am not persuaded that the case should proceed.

Apple asserted claims for declaratory relief for Motorola’s violation of its disclosure

obligations to the standard setting organization ETSI and engaged in patent misuse, but it has not explained why monetary damages would be inadequate relief if Motorola were to sue it for infringement and seek an exclusionary order against it in the future. Certainly there is no need to address Apple's claim for declaratory relief as it relates to Motorola's '898 patent. There is no likelihood that Motorola will (or can) sue Apple on the '898 patent after Judge Posner dismissed Motorola's claims with prejudice when Motorola was unable to prove the damages it alleged had been caused by Apple. Of course, it is possible that this ruling will be overturned on appeal, but until it is, Motorola cannot maintain a suit against Apple based on the '898 patent. If the ruling is overturned and the issue is remanded to the court in Illinois, Apple and Motorola can litigate the matter there.

Moreover, Apple has not identified any case that would support an order of exclusion if Motorola were found to have breached its obligation to disclose patents to ETSI when it failed to disclose the '898 patent. In any event, the remedy that Apple is seeking (an order of unenforceability) is so far out of proportion to any harm that Apple has suffered or is likely to suffer in the future that it is unlikely that any court would impose such an order. This is an example of what Judge Posner noted in the Illinois case: the requested injunctive relief "would impose costs disproportionate to the harm to the patentee" Apple Inc. v. Motorola Mobility, 2012 WL 2362630, *1 (June 7, 2012).

Apple has asked that if the case is dismissed it be without prejudice. A decision on that question will be made once the parties have completed the briefing.

At the November 5 hearing, Motorola suggested that the parties engage in binding arbitration to resolve their dispute. If the parties really wish to resolve this licensing dispute, this is the obvious solution. It would have many advantages to the parties. It would be conducted in private; the parties would not be bound by their pleadings; they would be able to negotiate any and all of the many aspects of their licensing agreement on which they disagree; and they would finish the process with an agreement that would determine once and for all what amount of licensing fees Apple is required to pay Motorola. In the end, this seems to be the best way, if not the only way, for the parties to negotiate a rate that takes into account the many elements of a licensing fee that are not part of this case but are critical to the determination of a fair, reasonable and non-discriminatory rate.

ORDER

IT IS ORDERED that

1. Plaintiff Apple's motion, dkt. #488, for reconsideration of the denial of its motion in limine to preclude defendant Motorola from introducing evidence that it was entitled to seek injunctions and exclusion orders to enforce its declared standards-essential patents and that doing so was not a violation of its obligations to the standard setting organizations and its motion to exclude Motorola's newly disclosed FRAND theories, dkt. #489, are DENIED as moot;

2. Apple's claim for declaratory relief is DENIED.

3. Apple's motion to enforce the court's determination at summary judgment that

ETSI's intellectual property rights policy unambiguously requires pre-adoption disclosure where a party submits a technical proposal, dkt. #491, is DENIED as moot; and

4. This case is DISMISSED.

5. The court will decide whether the dismissal is with or without prejudice after the parties have completed briefing on the issue.

Entered this 8th day of November, 2012.

BY THE COURT:

/s/

BARBARA B. CRABB

District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

APPLE INC.,

Plaintiff,

v.

MOTOROLA MOBILITY, INC.,

Defendant.

OPINION AND ORDER

11-cv-178-bbc

In a statement from the bench on November 5, 2012, I dismissed plaintiff Apple's Inc.'s remaining claims against defendant Motorola Mobility, Inc. In an order dated November 8, 2012, I explained in more detail the reasons for the dismissal, but I reserved a decision on the form of the dismissal and gave the parties an opportunity to brief the issue. Both parties have responded, with Apple arguing that its claims should be dismissed without prejudice and Motorola arguing the opposite.

I conclude that Apple's claims that were dismissed at the summary judgment stage must be dismissed with prejudice. Those include Apple's claims that Motorola violated § 2 of the Sherman Act (count 5), violated Cal. Bus. & Prof. Code § 17200 (count 6), and tortiously interfered with contracts (count 13). Order, dkt. #194 at 47. Those claims were dismissed on the merits and Apple has made no argument about why they should not be dismissed with prejudice. Turek v. General Mills, Inc., 662 F.3d 423, 425 (7th Cir. 2011)

(claim dismissed on merits should be dismissed with prejudice).

This leaves Apple’s claims for equitable estoppel (count 1); breach of contract (counts 2, 3, 4); and declaratory judgment (counts 7, 11, 12). As relief for those claims, Apple was seeking a declaration that Motorola had breached contracts with standards setting organizations and a determination by the court of a specific FRAND rate for Motorola’s standards-essential patents. Additionally, Apple had requested that the court declare Motorola’s ‘898 patent invalid and unenforceable as a result of Motorola’s failure to timely disclose it to standards setting organizations. I dismissed those claims because Apple had failed to show that its requests for extraordinary injunctive relief and discretionary declaratory relief were warranted under the circumstances. After reviewing the parties’ arguments on the issue, I conclude that Apple’s declaratory judgment, equitable estoppel and breach of contract claims must be dismissed without prejudice.

Generally, when a court dismisses a claim without reaching the merits, it should dismiss the claim without prejudice. Murray v. Conseco, Inc., 467 F.3d 602, 605 (7th Cir. 2006) (vacating district court’s dismissal with prejudice for lack of subject matter jurisdiction and remanding with instructions to dismiss complaint without prejudice because “[a] dismissal for lack of subject matter jurisdiction is not on the merits”). Thus, when courts decline to exercise discretionary jurisdiction or reach the merits of a declaratory judgment claim, they usually dismiss the claim without prejudice. E.g., International Harvester Co. v. Deere & Co., 623 F.2d 1207, 1218 (7th Cir. 1980) (explaining that claim for declaratory relief should have been dismissed without prejudice because court lacked subject matter

jurisdiction over claim, and even if jurisdiction existed, requested declaratory relief was not appropriate “at [the] time”). See also Ven-Fuel, Inc. v. Department of the Treasury, 673 F.2d 1194, 1195 (11th Cir. 1982) (modifying district court’s dismissal with prejudice of declaratory judgment action to dismissal without prejudice because district court declined to reach merits); Continental Casualty Co. v. Duckson, 826 F. Supp. 2d 1086, 1103 (N.D. Ill. 2011) (dismissing declaratory judgment claim without prejudice because claim was premature); Hickman v. Wells Fargo Bank N.A., 683 F. Supp. 2d 779, 790 (N.D. Ill. 2010) (dismissing declaratory judgment claim without prejudice because plaintiff failed to explain why declaration was necessary or appropriate).

As I explained in the orders entered November 2, dkt. #487, and November 8, dkt. #503, I dismissed Apple’s claims for declaratory relief because the decision whether to grant declaratory relief is discretionary, 28 U.S.C. § 2201(a), and it is inappropriate to issue declaratory judgment if “such a judgment would have no practical effect.” Dkt. #487 at 5 (citing Apple, Inc. v. Motorola, Inc., Case No. 1:11-CV-08540, 2012 WL 2376664, *23 (N.D. Ill. June 22, 2012). See also International Harvester Co., 623 F.2d at 1218 (“A declaratory judgment should issue only when it will serve a useful purpose.”). With respect to Apple’s request for declaratory relief related to Motorola’s ‘898 patent, Apple had not shown that the declaration was necessary or appropriate, in light of Judge Posner’s dismissal of Motorola’s patent infringement claims and Apple’s alleged harm. With respect to Apple’s declaratory judgment claim regarding licensing, I concluded that Apple had failed to show that its requested declaration would serve any purpose other than providing Apple a ceiling

on the potential license rate that it could use for negotiating purposes. Apple was requesting that the court declare that Motorola breached its contracts and “declare” a FRAND rate for Motorola’s patents, but Apple had refused to be bound by the rate chosen by the court. Instead, the rate simply would clarify whether Motorola’s license offers to Apple had been FRAND and if not, what the rate should have been. Thus, if Apple succeeded in establishing that Motorola breached its contracts but then refused to accept the rate chosen by the court, further litigation likely would be necessary to resolve the parties’ licensing and infringement disputes. Even under Apple’s modified trial proposals in which Apple agreed to be bound by a FRAND rate chosen by the court, there would be numerous issues remaining related to the parties’ licensing disputes. Thus, Apple’s requested declarations were unlikely to “serve a useful purpose.”

Under different circumstances, it may be appropriate for a court to entertain Apple’s requests for declaratory relief and consider the merits of Apple’s claims. International Harvester Co., 623 F.2d at 1218 (explaining that because dismissal was without prejudice, plaintiff was “free to seek a declaratory judgment in the future . . . when its need for relief is more compelling”). For example, it may be appropriate for a court to consider Apple’s arguments in the context of a patent infringement suit. However, under the circumstances presented, it was inappropriate to reach the merits of Apple’s claims for declaratory judgment, so I exercised the court’s discretion in dismissing the claims. Because I did not reach the merits of Apple’s declaratory judgment claims, I will dismiss them without prejudice.

With respect to Apple's claims for which it sought injunctive relief, I dismissed those claims because Apple failed to show that the court should order the extraordinary relief of specific performance. As I explained in the November 2 and November 8 orders, Apple's request for injunctive relief required it to satisfy the standards set forth in eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391 (2006). Apple failed to satisfy the eBay standards because it did not show that it had suffered irreparable harm, that money damages would be inadequate or that the public interest favored granting an injunction. Dkt. #487 at 4-5.

Although the legal basis for dismissing Apple's claims for injunctive relief was slightly different from the legal basis for dismissing the claims for declaratory judgment (Apple was not required to satisfy the eBay standards on its declaratory judgment claims), I dismissed the claims for injunctive relief for many of the reasons I dismissed the declaratory judgment claims. In particular, Apple failed to show that its requested injunction would serve any purpose other than providing Apple a bargaining chip in future negotiations or litigation. Kartman v. State Farm Mutual Automobile Insurance Co., 634 F.3d 883, 893 (7th Cir. 2011) (considering "as a practical matter, . . . what purpose would be served by" proposed injunction). As explained above, I am dismissing Apple's claim for declaratory relief without prejudice. I conclude that because Apple's claims for declaratory and injunctive relief are based on the same facts and arguments, rely on the same underlying theories of liability (breach of contract and equitable estoppel), were dismissed for similar reasons, and ultimately, seek similar forms of relief, Apple's claims for which it sought injunctive relief should also be dismissed without prejudice.

The parties suggest in their briefs that they are considering taking their disputes to arbitration, though they have disagreements about the scope and form of the arbitration. In addition to the explanations provided above, the possibility that this dispute can be resolved through binding arbitration is another reason why I conclude that Apple's breach of contract, equitable estoppel and declaratory judgment claims should be dismissed without prejudice. A dismissal with prejudice could inhibit the parties' efforts at resolving their disputes through binding arbitration.

ORDER

IT IS ORDERED that plaintiff Apple Inc.'s claims that defendant Motorola Mobility, Inc. violated § 2 of the Sherman Act (count 5), violated Cal. Bus. & Prof. Code § 17200 (count 6), and tortiously interfered with contracts (count 13) are DISMISSED WITH PREJUDICE. Apple's claims against Motorola for equitable estoppel (count 1), breach of contract (counts 2, 3, 4), and declaratory judgment (counts 7, 11, 12), are DISMISSED WITHOUT PREJUDICE. The clerk of court is directed to enter judgment accordingly and close this case.

Entered this 28th day of November, 2012.

BY THE COURT:

/s/

BARBARA B. CRABB

District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

APPLE INC.,

Plaintiff,

v.

MOTOROLA MOBILITY, INC.,

Defendant.

JUDGMENT IN A CIVIL CASE


Case No. 11-cv-178-bbc

This action came for consideration before the court with District Judge Barbara B. Crabb presiding. The issues have been considered and a decision has been rendered.

IT IS ORDERED AND ADJUDGED that judgment is entered in favor of defendant Motorola Mobility, Inc. and against plaintiff Apple Inc. as follows:

1. Granting defendant's motion to dismiss plaintiff's claim of waiver for failure to state a claim upon which relief may be granted;
2. Granting defendant's motion for partial summary judgment and dismissing with prejudice plaintiff's claims that defendant violated § 2 of the Sherman Act (count 5), violated Cal. Bus. & Prof. Code § 17200 (count 6), and tortiously interfered with contracts (count 13); and
3. Dismissing without prejudice plaintiff's claims against defendant for equitable estoppel (count 1), breach of contract (counts 2, 3 and 4), and declaratory judgment (counts 7, 11 and 12).


Peter Oppeneer, Clerk of Court


Date

APPEAL,CLOSED,SP

**U.S. District Court
Western District of Wisconsin (Madison)
CIVIL DOCKET FOR CASE #: 3:11-cv-00178-bbc**

Apple Inc. v. Motorola Mobility, Inc.
Assigned to: District Judge Barbara B. Crabb
Referred to: Magistrate Judge Peter A. Oppeneer
Cause: 28:1332 Diversity-Breach of Contract

Date Filed: 03/11/2011
Date Terminated: 11/28/2012
Jury Demand: Plaintiff
Nature of Suit: 190 Contract: Other
Jurisdiction: Diversity

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Date Filed	#	Docket Text
03/11/2011	<u>1</u>	NOTICE OF REMOVAL from United States International Trade Commission, case number 337-TA-745, filed by Apple Inc. (Filing Fee \$350, receipt number 34690010320) (<u>Sealed Document</u>) (Attachments: # <u>1</u> Counterclaims, # <u>2</u> Summons, # <u>3</u> JS-44 Civil Cover Sheet) (Peterson, James) Modified security setting on 3/14/2011. (arw) (Entered: 03/11/2011)
03/11/2011	<u>2</u>	Motion to Seal Document <u>1</u> Removal, <u>3</u> Motion for Preliminary

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		Injunction, 4 Proposed Findings of Facts, 5 Affidavit of Lutton, 6 Brief in Support, 7 Declaration of Cherensky and 8 Exhibits by Plaintiff Apple Inc. (Peterson, James) Modified docket text/relationship on 3/14/2011 (mmo). (Entered: 03/11/2011)
03/11/2011	3	MOTION FOR PRELIMINARY INJUNCTION (<u>Sealed Document</u>) by Plaintiff Apple Inc. (Attachments: # 1 Text of Proposed Order) (Peterson, James) (Entered: 03/11/2011)
03/11/2011	4	Proposed Findings of Fact filed by Plaintiff Apple Inc. re: 3 MOTION FOR PRELIMINARY INJUNCTION (<u>Sealed Document</u>) filed by Apple Inc. (<u>Sealed Document</u>) (Peterson, James) (Entered: 03/11/2011)
03/11/2011	5	Affidavit of Richard Lutton filed by Plaintiff Apple Inc. re: 3 MOTION FOR PRELIMINARY INJUNCTION (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - 3G Cellular Standards and Patents, # 2 Exhibit 2 - Press Release) (Peterson, James) (Entered: 03/11/2011)
03/11/2011	6	Brief in Support of 3 Motion for Preliminary Injunction by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Peterson, James) (Entered: 03/11/2011)
03/11/2011	7	Declaration of Steven Cherensky filed by Plaintiff Apple Inc. re: 3 MOTION FOR PRELIMINARY INJUNCTION (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 337-745, Corrected Public Verified Complaint, # 2 Exhibit 2 ND. ILL. Complaint- 10-cv-6381, # 3 Exhibit 3 S.D. Fla. Complaint- 10-cv-23580, # 4 Exhibit 4 Old Version ITC 745 Complaint Motorola v Apple, # 5 Exhibit 5 D. Del Complaint- 10-cv-00867, # 6 Exhibit 6 337-TA-745 Notice of Investigation 2010-11-03, # 7 Exhibit 7 Motorola Answer and Counterclaims to Apple Complaint 10-cv-00662 2010-11-09, # 8 Exhibit 8 Complaint for Patent Infringement 10-cv-00661 2010-10-29, # 9 Exhibit 9 Apple's Verified Complaint in 337-TA-750- Stamped Version 2010 10 28, # 10 Exhibit 10 ETSI IPR-Policy, # 11 Exhibit 11 3GPP Working Procedures - full text, # 12 Exhibit 12 IEEE Standards Board Guidelines, # 13 Exhibit 13 TIA Engineering Manual, # 14 Exhibit 14 697 ETSI Essential Declaration, # 15 Exhibit 15 559 ETSI Essential Declaration, # 16 Exhibit 16 898 ETSI Essential Declaration, # 17 Exhibit 17 230 ETSI Essential Declaration, # 18 Exhibit 18 IEEE 802 11 Motorola letter 01Mar1994, # 19 Exhibit 19 IEEE 802.16e Letter of Assurance,

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		# 20 Exhibit 20 TIA Statement from Patent Holder, # 21 Exhibit 21 2011 03 11 CBI-Counterclaims, # 22 Exhibit 22 Lemley Article, # 23 Exhibit 23 Miller Article, # 24 Exhibit 24 697 Patent, # 25 Exhibit 25 Exhibit 21 of Motorola ITC 745 Complaint - Infringement contentions for the 697 Patent) (Peterson, James) (Entered: 03/11/2011)
03/11/2011	8	EXHIBITS to 7 Declaration of Cherensky filed by Plaintiff Apple Inc. - <i>Exhibits 26 through 40 to the Declaration of Steven Cherensky</i> 7 re: 3 MOTION FOR PRELIMINARY INJUNCTION (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 26 697 File History, # 2 Exhibit 27 3GPP 25 213 version 3 1 1, # 3 Exhibit 28 559 Patent, # 4 Exhibit 29 Motorola Mobility's Asserted Claims and Accused Products, # 5 Exhibit 30 559 File History, # 6 Exhibit 31 898 Patent, # 7 Exhibit 32 898 File History, # 8 Exhibit 33 898 Provisional Application, # 9 Exhibit 34-part 1 GSM 4 60 v 6 3 1 Release 1997), # 10 Exhibit 34-part 2 GSM 4 60 v 6 3 1 Release 1997), # 11 Exhibit 34-part 3 GSM 4 60 v 6 3 1 Release 1997), # 12 Exhibit 34-part 4 GSM 4 60 v 6 3 1 Release 1997), # 13 Exhibit 35 230 Patent, # 14 Exhibit 36 3GPP 26 090 version 3 1 0 Release 1999, # 15 Exhibit 37 Notice of Removal, # 16 Exhibit 38 Countdown Value Definition 898 Moto Nov 97 submission, # 17 Exhibit 39 Evaluation of Proposed RACH Signatures, # 18 Exhibit Exh 40 Proposal of RACH Preambles) (Peterson, James) (Entered: 03/11/2011)
03/11/2011	9	Corporate Disclosure Statement by Plaintiff Apple Inc. (Peterson, James) (Entered: 03/11/2011)
03/12/2011	10	Certificate of Service by Plaintiff Apple Inc. (Peterson, James) (Entered: 03/12/2011)
03/14/2011		Case assigned to District Judge Barbara B. Crabb and Magistrate Judge Stephen L. Crocker. (arw) (Entered: 03/14/2011)
03/14/2011		Standard attachments for Judge Barbara B. Crabb required to be served on all parties with summons or waiver of service: NORTC , Briefing Guidelines , Corporate Disclosure Statement , Order on Dispositive

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		Motions , Preliminary Injunction Procedure . (arw) (Entered: 03/14/2011)
03/14/2011	11	Summons Issued as to Motorola Mobility, Inc. (arw) (Entered: 03/14/2011)
03/16/2011		Set Briefing Deadlines re: 3 MOTION FOR PRELIMINARY INJUNCTION by Plaintiff Apple Inc. Brief in Opposition due 3/30/2011. Brief in Reply due 4/6/2011. (arw/skv) (Entered: 03/16/2011)
03/16/2011	12	** TEXT ONLY ORDER ** ORDER granting 2 Motion to Seal Documents by Plaintiff Apple Inc. Signed by Magistrate Judge Stephen L. Crocker on 3/16/2011. (arw) (Entered: 03/16/2011)
03/18/2011	13	Summons Returned Executed. Motorola Mobility, Inc. served on 3/15/2011, answer due 4/5/2011. (Peterson, James) (Entered: 03/18/2011)
03/23/2011	14	Joint Motion for Modification of the Scheduling Order by Plaintiff Apple Inc., Defendant Motorola Mobility, Inc. Response due 3/30/2011. (Peterson, James) (Entered: 03/23/2011)
03/24/2011	15	Notice by Plaintiff Apple Inc. re 3 MOTION FOR PRELIMINARY INJUNCTION (Sealed Document) <i>Update Regarding Apples Motion for Preliminary Injunction.</i> (Sealed Document) (Peterson, James) (Entered: 03/24/2011)
03/24/2011	16	Motion to Seal 15 <i>Notice: Update Regarding Apples Motion for Preliminary Injunction</i> by Plaintiff Apple Inc.. Motions referred to Magistrate Judge Stephen L. Crocker. (Peterson, James) Modified docket relationship on 3/25/2011 (mmo). (Entered: 03/24/2011)
03/24/2011	17	Certificate of Service by Plaintiff Apple Inc. (Peterson, James) (Entered: 03/24/2011)
03/25/2011	18	** TEXT ONLY ORDER ** ORDER granting 16 Motion to Seal by Plaintiff Apple Inc., granting 14 Joint Motion for Modification of Scheduling Order. Brief in Opposition re: 3 Motion for Preliminary Injunction due 4/8/2011. Brief in Reply due 4/15/2011. Defendant Motorola Mobility, Inc. answer due 4/8/2011. Signed by Magistrate Judge Peter Oppeneer on 3/25/2011. (arw) (Entered: 03/25/2011)
03/25/2011		Reset Briefing Deadlines re: 3 MOTION FOR PRELIMINARY INJUNCTION by Plaintiff Apple Inc. Brief in Opposition due 4/8/2011. Brief in Reply due 4/15/2011. (arw) (Entered: 03/25/2011)
03/25/2011		Reset Answer Deadline: Defendant Motorola Mobility, Inc. answer due 4/8/2011. (arw) (Entered: 03/25/2011)

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04/08/2011	<u>19</u>	Motion to Admit Thomas R. Watson, Brian C. Cannon, Richard W. Erwine, Linda J. Brewer, Carlos A. Rodriguez, Meghan E. Bordonaro, David L. Shaul, Melissa N. Chan, and Kathleen M. Sullivan Pro Hac Vice by Defendant Motorola Mobility, Inc. Motions referred to Magistrate Judge Stephen L. Crocker. (Kass, Lisa) (Entered: 04/08/2011)
04/08/2011	<u>20</u>	Declaration of Meghan E. Bordonaro filed by Defendant Motorola Mobility, Inc. re: <u>19</u> Motion to Admit Thomas R. Watson, Brian C. Cannon, Richard W. Erwine, Linda J. Brewer, Carlos A. Rodriguez, Meghan E. Bordonaro, David L. Shaul, Melissa N. Chan, and Kathleen M. Sullivan Pro Hac Vice (Kass, Lisa) (Entered: 04/08/2011)
04/08/2011	<u>21</u>	Declaration of Linda J. Brewer filed by Defendant Motorola Mobility, Inc. re: <u>19</u> Motion to Admit Thomas R. Watson, Brian C. Cannon, Richard W. Erwine, Linda J. Brewer, Carlos A. Rodriguez, Meghan E. Bordonaro, David L. Shaul, Melissa N. Chan, and Kathleen M. Sullivan Pro Hac Vice (Kass, Lisa) (Entered: 04/08/2011)
04/08/2011	<u>22</u>	Declaration of Brian C. Cannon filed by Defendant Motorola Mobility, Inc. re: <u>19</u> Motion to Admit Thomas R. Watson, Brian C. Cannon, Richard W. Erwine, Linda J. Brewer, Carlos A. Rodriguez, Meghan E. Bordonaro, David L. Shaul, Melissa N. Chan, and Kathleen M. Sullivan Pro Hac Vice (Kass, Lisa) (Entered: 04/08/2011)
04/08/2011	<u>23</u>	Declaration of Melissa N. Chan filed by Defendant Motorola Mobility, Inc. re: <u>19</u> Motion to Admit Thomas R. Watson, Brian C. Cannon, Richard W. Erwine, Linda J. Brewer, Carlos A. Rodriguez, Meghan E. Bordonaro, David L. Shaul, Melissa N. Chan, and Kathleen M. Sullivan Pro Hac Vice (Kass, Lisa) (Entered: 04/08/2011)
04/08/2011	<u>24</u>	Declaration of Richard W. Erwine filed by Defendant Motorola Mobility, Inc. re: <u>19</u> Motion to Admit Thomas R. Watson, Brian C. Cannon, Richard W. Erwine, Linda J. Brewer, Carlos A. Rodriguez, Meghan E. Bordonaro, David L. Shaul, Melissa N. Chan, and Kathleen M. Sullivan Pro Hac Vice (Kass, Lisa) (Entered: 04/08/2011)
04/08/2011	<u>25</u>	Declaration of Carlos A. Rodriguez filed by Defendant Motorola Mobility, Inc. re: <u>19</u> Motion to Admit Thomas R. Watson, Brian C. Cannon, Richard W. Erwine, Linda J. Brewer, Carlos A. Rodriguez, Meghan E. Bordonaro, David L. Shaul, Melissa N. Chan, and Kathleen M. Sullivan Pro Hac Vice (Kass, Lisa) (Entered: 04/08/2011)
04/08/2011	<u>26</u>	Declaration of David L. Shaul filed by Defendant Motorola Mobility, Inc. re: <u>19</u> Motion to Admit Thomas R. Watson, Brian C. Cannon, Richard W. Erwine, Linda J. Brewer, Carlos A. Rodriguez, Meghan E. Bordonaro, David L. Shaul, Melissa N. Chan, and Kathleen M. Sullivan Pro Hac Vice (Kass, Lisa) (Entered: 04/08/2011)

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04/08/2011	27	Declaration of Kathleen M. Sullivan filed by Defendant Motorola Mobility, Inc. re: 19 Motion to Admit Thomas R. Watson, Brian C. Cannon, Richard W. Erwine, Linda J. Brewer, Carlos A. Rodriguez, Meghan E. Bordonaro, David L. Shaul, Melissa N. Chan, and Kathleen M. Sullivan Pro Hac Vice (Kass, Lisa) (Entered: 04/08/2011)
04/08/2011	28	Declaration of Thomas R. Watson filed by Defendant Motorola Mobility, Inc. re: 19 Motion to Admit Thomas R. Watson, Brian C. Cannon, Richard W. Erwine, Linda J. Brewer, Carlos A. Rodriguez, Meghan E. Bordonaro, David L. Shaul, Melissa N. Chan, and Kathleen M. Sullivan Pro Hac Vice (Kass, Lisa) (Entered: 04/08/2011)
04/08/2011	29	Certificate of Service by Defendant Motorola Mobility, Inc. (Kass, Lisa) (Entered: 04/08/2011)
04/08/2011	30	Notice by Plaintiff Apple Inc. of <i>Cross-Use Agreement for Discovery Materials</i> . (Attachments: # 1 Exhibit A - Cross-Use Agreement) (Peterson, James) (Entered: 04/08/2011)
04/08/2011	31	Notice by Plaintiff Apple Inc. of <i>Agreement Regarding Email Discovery</i> . (Attachments: # 1 Exhibit A - Agreement Regarding Email Discovery) (Peterson, James) (Entered: 04/08/2011)
04/08/2011	32	Motion to Seal 35 Memorandum in Support of Motion to Dismiss; 37 Motion and Memorandum in Support of Motion to Strike; 36 Opposition to Apple Inc.'s Motion for Preliminary Injunction; 38 Response to Apple Inc.'s Statement of Proposed Facts; Declarations of 50 Dailey, 40 Holleman and 49 Cannon, filed by Defendant Motorola Mobility, Inc. Motions referred to Magistrate Judge Stephen L. Crocker. (Bauer, Jennifer) Modified docket relationships on 4/11/2011. (mmo) (Entered: 04/08/2011)
04/08/2011	33	MOTION TO DISMISS by Defendant Motorola Mobility, Inc. Brief in Opposition due 4/29/2011. Brief in Reply due 5/9/2011. (Nelson, David) (Entered: 04/08/2011)
04/08/2011	34	Corporate Disclosure Statement by Defendant Motorola Mobility, Inc. (Bauer, Jennifer) (Entered: 04/08/2011)
04/08/2011	35	Brief in Support of 33 Motion to Dismiss by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit Appendix A, # 2 Exhibit Proposed Order) (Nelson, David) (Entered: 04/08/2011)
04/08/2011	36	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 3 MOTION FOR PRELIMINARY INJUNCTION (<u>Sealed Document</u>) filed by Apple Inc. (<u>Sealed Document</u>) (Attachments:

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		# 1 Text of Proposed Order) (Bauer, Jennifer) (Entered: 04/08/2011)
04/08/2011	37	Motion to Strike and Memorandum in Support re 5 Affidavit of <i>Richard Lutton</i> (<u>Sealed Document</u>) by Defendant Motorola Mobility, Inc. Response due 4/15/2011. (Attachments: # 1 Text of Proposed Order) (Nelson, David) Modified docket text on 4/11/2011. (mmo) (Entered: 04/08/2011)
04/08/2011	38	Response to Proposed Findings of Fact filed by Defendant Motorola Mobility, Inc. re: 3 MOTION FOR PRELIMINARY INJUNCTION (<u>Sealed Document</u>) (<u>Sealed Document</u>) (Bauer, Jennifer) (Entered: 04/08/2011)
04/08/2011	39	Motion to Sever <i>and Consolidate</i> by Defendant Motorola Mobility, Inc. Response due 4/15/2011. (Nelson, David) (Entered: 04/08/2011)
04/08/2011	40	Declaration of Richard J. Holleman filed by Defendant Motorola Mobility, Inc. <i>in support of Motorola's Opposition to Apple's</i> re: 3 MOTION FOR PRELIMINARY INJUNCTION (<u>Sealed Document</u>) (<u>Sealed Document</u>) (Attachments: # 1 Exhibit A-Holleman Curriculum Vitae) (Nelson, David) Modified exhibit descripton on 4/11/2011 (mmo). (Entered: 04/08/2011)
04/08/2011	41	Disregard-Refiled as entry 49 ; Modified on 4/11/2011; asked to refile with exhibit descriptions. (mmo) (Entered: 04/08/2011)
04/08/2011	42	Disregard-Refiled as entry 50 ; Modified on 4/11/2011; asked to refile with exhibit descriptions. (mmo) (Entered: 04/08/2011)
04/08/2011	43	Certificate of Service by Defendant Motorola Mobility, Inc. (Bauer, Jennifer) (Entered: 04/08/2011)
04/11/2011	44	Motion to Admit Penny Reid Pro Hac Vice by Plaintiff Apple Inc. Motions referred to Magistrate Judge Stephen L. Crocker. (Attachments: # 1 CM/ECF Registration) (Cahill, Bryan) (Entered: 04/11/2011)
04/11/2011	45	Declaration of Penny Reid filed by Plaintiff Apple Inc. re: 44 Motion to Admit Penny Reid Pro Hac Vice (Cahill, Bryan) (Entered: 04/11/2011)
04/11/2011	46	** TEXT ONLY ORDER ** ORDER granting 32 Motion to Seal by Defendant Motorola Mobility, Inc. Signed by Magistrate Judge Stephen L. Crocker on 4/11/2011. (arw) (Entered: 04/11/2011)
04/11/2011	47	Motion to Admit Carrie M. Anderson Pro Hac Vice by Plaintiff Apple Inc. Motions referred to Magistrate Judge Stephen L. Crocker. (Attachments: # 1 CM/ECF Registration) (Cahill, Bryan) (Entered: 04/11/2011)

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04/11/2011	48	Declaration of Carrie Anderson filed by Plaintiff Apple Inc. re: 47 Motion to Admit Carrie M. Anderson Pro Hac Vice (Cahill, Bryan) (Entered: 04/11/2011)
04/11/2011	49	Declaration of Brian C. Cannon filed by Defendant Motorola Mobility, Inc. re: 37 Motion to Strike 5 Affidavit of <i>Richard Lutton</i> (<u>Sealed Document</u>), 3 MOTION FOR PRELIMINARY INJUNCTION (<u>Sealed Document</u>). (Attachments: # 1 Exhibit 1 - Motorola Corporate History, # 2 Exhibit 2 - Motorola Corporate History, # 3 Exhibit 3 - Letter of Assurance to IEEE, # 4 Exhibit 4 - IPR Information Statement and Licensing Declaration to ETSI, # 5 Exhibit 5 - IPR Information Statement and Licensing Declaration to ETSI, # 6 Exhibit 6 - IPR Information Statement and Licensing Declaration to ETSI, # 7 Exhibit 7 - IPR Information Statement and Licensing Declaratoin to ETSI, # 8 Exhibit 8 - Intellectual Property Statement to IEEE, # 9 Exhibit 9 - Letter of Assurance to IEEE, # 10 Exhibit 10 - Letter of Assurance to IEEE, # 11 Exhibit 11 - Letter of Assurance to IEEE, # 12 Exhibit 12 - Letter of Assurance to IEEE, # 13 Exhibit 13 - Letter of Assurance to IEEE, # 14 Exhibit 14 - 06/28/2007 Apple Press Release, # 15 Exhibit 15 - Excerpts from Deposition of R. Lutton, # 16 Exhibit 16 - Joint Report Concerning First Mandatory Settlement Conference submitted in ITC investigation No. 337-TA-745, # 17 Exhibit 17 - Joint Motion for Extension of Deadline to Select a Mediator submitted in ITC investigation No. 337-TA-745, # 18 Exhibit 18 - 10/28/2009 Motorola Press Release, # 19 Exhibit 19 - 03/02/2010 Apple Press Release, # 20 Exhibit 20 - Order No. 5 in ITC investigation No. 337-TA-745, # 21 Exhibit 21 - Joint Motion to Stay Claims and Counterclaims filed in Case No. 3:10-CV-00661-BBC (D.I. 12), # 22 Exhibit 22 - civil docket for Case No. 3:10-cv-00661-BBC, # 23 Exhibit 23 - Apple's Response in ITC investigation No. 377-TA-745, # 24 Exhibit 24 - Notice of Deposition to Motorola in ITC investigation No. 377-TA-745, # 25 Exhibit 25 - letter dated 04/07/2011, # 26 Exhibit 26 - ETSI Intellectual Property Rights Policy, # 27 Exhibit 27 - IEEE Certificate of Incorporation, # 28 Exhibit 28 - TIA Contact Information, # 29 Exhibit 29 - Deposition of R. Lutton Exhibit 11,

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		# 30 Exhibit 30 - Apple Store Listing for iPod touch, # 31 Exhibit 31 - Best Buy online listing for iPhone 4) (Bauer, Jennifer) Modified on 4/11/2011; added exhibit numbers 10-12. (mmo) (Entered: 04/11/2011)
04/11/2011	50	Declaration of Kirk W. Dailey filed by Defendant Motorola Mobility, Inc. re: 3 MOTION FOR PRELIMINARY INJUNCTION (<u>Sealed Document</u>). (Attachments: # 1 Exhibit 1 - License Agreement dated 07/01/2007, # 2 Exhibit 2 - License Agreement dated 07/30/2004, # 3 Exhibit 3 - License Agreement dated 04/06/2004, # 4 Exhibit 4.1 - License Agreement dated 06/10/2010 (part 1 of 2), # 5 Exhibit 4.2 - License Agreement dated 06/10/2010 (part 2 of 2), # 6 Exhibit 5 - Licensing Executives Society Article, # 7 Exhibit 6 - Letter dated 08/06/2007, # 8 Exhibit 7 - Non-Disclosure Agreement dated 08/06/2007, # 9 Exhibit 8 - Letter dated 09/11/2007, # 10 Exhibit 9 - 09/27/2007 Presentation, # 11 Exhibit 10 - Letter dated 03/05/2008, # 12 Exhibit 11 - Non-Disclosure Agreement dated 01/04/2011) (Bauer, Jennifer) (Entered: 04/11/2011)
04/11/2011	51	** TEXT ONLY ORDER ** ORDER granting 44 Motion to Admit Penny Reid Pro Hac Vice, granting 47 Motion to Admit Carrie M. Anderson Pro Hac Vice. Signed by Magistrate Judge Stephen L. Crocker on 4/11/2011. (arw) (Entered: 04/11/2011)
04/12/2011		Set Deadlines and Hearings re: 3 Motion for Preliminary Injunction by Plaintiff Apple Inc. If necessary, a hearing on the motion will be held on 4/26/2011 at 9:00 AM before District Judge Barbara B. Crabb. (arw/sp) (Entered: 04/12/2011)
04/13/2011	52	Notice of Appearance of <i>Covington & Burling LLP</i> Attorneys filed by Robert T. Haslam for Plaintiff Apple Inc. (Haslam, Robert) (Entered: 04/13/2011)
04/14/2011		Set Pretrial Conference: Telephone Pretrial Conference set for 6/2/2011 at 10:00 AM before Magistrate Judge Stephen L. Crocker. Counsel for Plaintiff responsible for setting up the call to chambers at (608) 264-5153. Standing Order Governing Preliminary Pretrial Conference attached. (arw) (Entered: 04/14/2011)
04/15/2011	53	** TEXT ONLY ORDER ** ORDER granting 19 Motion to Admit Brian C. Cannon, Richard W. Erwine and Meghan E. Bordonaro Pro Hac Vice. Signed by Magistrate Judge Stephen L. Crocker on 4/14/2011. (arw) (Entered: 04/15/2011)

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04/15/2011	54	Motion to Seal <i>Deposition Transcripts of Kirk Dailey, Richard Holleman and Richard Lutton</i> by Plaintiff Apple Inc. Motions referred to Magistrate Judge Stephen L. Crocker. (Peterson, James) Modified docket text on 4/15/2011. (arw) (Entered: 04/15/2011)
04/15/2011	55	Deposition of Kirk W. Dailey taken on April 12, 2011 (<u>Sealed Document</u>) (Peterson, James) (Entered: 04/15/2011)
04/15/2011	56	Deposition of Richard J. Holleman taken on April 11, 2011 (<u>Sealed Document</u>) (Peterson, James) (Entered: 04/15/2011)
04/15/2011	57	Deposition of Richard Lutton taken on April 1, 2011 (<u>Sealed Document</u>) (Peterson, James) (Entered: 04/15/2011)
04/15/2011	58	** TEXT ONLY ORDER ** ORDER granting 54 Motion to Seal by Plaintiff Apple Inc. Signed by Magistrate Judge Stephen L. Crocker on 4/15/2011. (arw) (Entered: 04/15/2011)
04/15/2011	59	** TEXT ONLY ORDER ** ORDER granting 19 Motion to Admit David L. Shaul, Carlos A. Rodriguez and Thomas R. Watson Pro Hac Vice. Signed by Magistrate Judge Stephen L. Crocker on 4/15/2011. (arw) (Entered: 04/15/2011)
04/15/2011	60	Motion to Seal 61 <i>Reply Memorandum in Further Support of Preliminary Injunction</i> ; 62 <i>Declaration of Penny Reid</i> ; 64 <i>Opposition to Motorola Mobility's Motion to Sever and Consolidate</i> ; 63 <i>Opposition to Motorola Mobility's Motion to Strike</i> by Plaintiff Apple Inc. Motions referred to Magistrate Judge Stephen L. Crocker. (Peterson, James) Modified docket text on 4/18/2011. (arw) Modified docket relationship on 4/18/2011. (mmo) (Entered: 04/15/2011)
04/15/2011	61	Brief in Reply by Plaintiff Apple Inc. in Support of 3 Motion for Preliminary Injunction - <i>Plaintiff's Reply Memorandum in Further Support of its Motion for Preliminary Injunction</i> (<u>Sealed Document</u>) (Peterson, James) (Entered: 04/15/2011)
04/15/2011	62	Declaration of Penny Reid <i>in Support of Plaintiff's Reply Memorandum</i> re: 3 MOTION FOR PRELIMINARY INJUNCTION by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - RIM Complaint, # 2 Exhibit 2 - RIM 3rd Amended Complaint, # 3 Exhibit 3 - Moto Answer to 3rd Am. Complaint, # 4 Exhibit 4 - ETSI Website - About ETSI, # 5 Exhibit 5 - ETSI Directive, # 6 Exhibit 6 - Moto Notice of Deposition, # 7 Exhibit 7 - Samsung Agreement, # 8 Exhibit 8 - Ericsson Agmt, # 9 Exhibit 9 - LG Agreement) (Peterson, James) Modified docket text

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		on 4/19/2011. (arw) (Entered: 04/15/2011)
04/15/2011	63	Brief in Opposition by Plaintiff Apple Inc. re: 37 Motion to Strike 5 Affidavit of Richard Lutton (<u>Sealed Document</u>) filed by Motorola Mobility, Inc. <i>Apple Inc.'s Opposition to Motorola Mobility's Motion to Strike Paragraphs of the Affidavit of Richard Lutton Submitted in Support of Plaintiff's Motion for Preliminary Injunction.</i> (<u>Sealed Document</u>) (Peterson, James) Modified docket text on 4/19/2011. (arw) (Entered: 04/15/2011)
04/15/2011	64	Brief in Opposition by Plaintiff Apple Inc. re: 39 Motion to Sever and Consolidate filed by Motorola Mobility, Inc. <i>Apple's Opposition to Motorola Mobility's Motion to Sever and Consolidate.</i> (<u>Sealed Document</u>) (Peterson, James) Modified docket text on 4/19/2011. (arw) (Entered: 04/15/2011)
04/15/2011	65	Certificate of Service by Plaintiff Apple Inc. (Peterson, James) (Entered: 04/15/2011)
04/18/2011	66	** TEXT ONLY ORDER ** ORDER granting 60 Motion to Seal by Plaintiff Apple Inc. Signed by Magistrate Judge Stephen L. Crocker on 4/18/2011. (arw) (Entered: 04/18/2011)
04/19/2011		NOTE TO COUNSEL: Motion Hearing set for 4/26/2011 at 9:00 AM re: 3 Motion for Preliminary Injunction by Plaintiff Apple Inc. will take place as scheduled before District Judge Barbara B. Crabb. (arw) (Entered: 04/19/2011)
04/20/2011	67	** TEXT ONLY ORDER ** ORDER granting 19 Motion to Admit Linda J. Brewer and Kathleen M. Sullivan Pro Hac Vice. Signed by Magistrate Judge Stephen L. Crocker on 4/20/2011. (arw) (Entered: 04/20/2011)
04/20/2011	68	** TEXT ONLY ORDER ** ORDER granting 19 Motion to Admit Melissa N. Chan Pro Hac Vice. Signed by Magistrate Judge Stephen L. Crocker on 4/20/2011. (arw) (Entered: 04/20/2011)
04/20/2011	69	Notice by Plaintiff Apple Inc., Defendant Motorola Mobility, Inc. re 3 MOTION FOR PRELIMINARY INJUNCTION (<u>Sealed Document</u>) <i>Regarding Preliminary Injunction Hearing.</i> (Peterson, James) (Entered: 04/20/2011)
04/22/2011	70	Joint Motion for Approval of Additional Presentation Equipment During Preliminary Injunction Hearing by Plaintiff Apple Inc., Defendant Motorola Mobility, Inc. Response due 4/29/2011. (Peterson, James) (Entered: 04/22/2011)

04/22/2011	71	** TEXT ONLY ORDER ** ORDER granting 70 Joint Motion for Approval of Additional Presentation Equipment During Preliminary Injunction Hearing. Signed by Magistrate Judge Stephen L. Crocker on 4/22/2011. (arw) (Entered: 04/22/2011)
04/22/2011	72	Motion to Admit Robert W. Stone Pro Hac Vice by Defendant Motorola Mobility, Inc. Motions referred to Magistrate Judge Stephen L. Crocker. (Attachments: # 1 CM/ECF Registration Form, # 2 Certificate of Service) (Kass, Lisa) (Entered: 04/22/2011)
04/22/2011	73	Declaration of Robert W. Stone filed by Defendant Motorola Mobility, Inc. re: 72 Motion to Admit Robert W. Stone Pro Hac Vice (Kass, Lisa) (Entered: 04/22/2011)
04/22/2011	74	Motion to Seal 75 <i>Reply in Support of Motion to Strike Certain Paragraphs of Lutton Affidavit</i> by Defendant Motorola Mobility, Inc. Motions referred to Magistrate Judge Stephen L. Crocker. (Nelson, David) Modified docket relationship on 4/25/2011. (mmo) (Entered: 04/22/2011)
04/22/2011	75	Brief in Reply by Defendant Motorola Mobility, Inc. in Support of 37 Motion to Strike, <i>Certain Paragraphs of the Affidavit of Richard Lutton</i> (<u>Sealed Document</u>) (Nelson, David) (Entered: 04/22/2011)
04/22/2011	76	Certificate of Service by Defendant Motorola Mobility, Inc. (Nelson, David) (Entered: 04/22/2011)
04/25/2011	77	** TEXT ONLY ORDER ** ORDER granting 72 Motion to Admit Robert W. Stone Pro Hac Vice. Signed by Magistrate Judge Stephen L. Crocker on 4/25/2011. (arw) (Entered: 04/25/2011)
04/25/2011	78	** TEXT ONLY ORDER ** ORDER granting 74 Motion to Seal <i>Reply in Support of Motion to Strike</i> . Signed by Magistrate Judge Stephen L. Crocker on 4/25/2011. (arw) (Entered: 04/25/2011)
04/25/2011	79	Motion to Clear Courtroom Should Highly Confidential Information Be Published at Hearing by Plaintiff Apple Inc., Defendant Motorola Mobility, Inc. Response due 5/2/2011. (Attachments: # 1 Certificate of Service to Joint Motion) (Stathas, Lynn) (Entered: 04/25/2011)
04/26/2011	80	Minute Entry for proceedings held before District Judge Barbara B. Crabb: Motion Hearing held on 4/26/2011. [2:35] (Court Reporter CS.) (voc) (Entered: 04/26/2011)

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04/29/2011	81	Brief in Opposition by Plaintiff Apple Inc. re: 33 MOTION TO DISMISS filed by Motorola Mobility, Inc. (Sealed Document) (Peterson, James) (Entered: 04/29/2011)
04/29/2011	82	Declaration of Penny Reid filed by Plaintiff Apple Inc. re: 33 MOTION TO DISMISS (Sealed Document) (Attachments: # 1 Exhibit 1, Motorola, Inc.'s Brief in Support of its Motion to Dismiss or Stay Plaintiff's Antitrust And Contract Claims, filed Apr. 10, 2008, in Research in Motion Ltd. (RIM) v. Motorola, Inc., No. 3:08-CV-0284 (N.D. Tex.), ECF No. 33, # 2 Exhibit 2, Wi-LAN, Inc.'s Complaint, filed June 19, 2008, in Wi-LAN, Inc. v. Research in Motion Corp., No. 2:08-CV-247-TJW (E.D. Tex.) (the Wi-LAN action), # 3 Exhibit 3, Motorola, Inc.'s Answer, Affirmative Defenses and Counterclaims to Wi-LAN, Inc.'s Third Amended Complaint, filed Sept. 18, 2009, in the Wi-LAN action, ECF No. 63, # 4 Exhibit 4, RIM's Complaint, filed February 16, 2008, in RIM v. Motorola, Inc., No. 3:08-cv-0284 (N.D. Tex.), ECF No. 1, # 5 Exhibit 5, Court's Order Denying Nokia's Motion to Dismiss, Nokia Corp. v. Apple Inc., No. 1:09-cv-00791-GMS (D. Del. June 7, 2010), ECF No. 55, # 6 Exhibit 6, Apple Inc.'s First Amended Answer, Defenses and Counterclaims, filed February 19, 2010, in Nokia Corp. v. Apple Inc., No. 1:09-cv-00791-GMS (D. Del.), ECF No. 21) (Peterson, James) (Entered: 04/29/2011)
04/29/2011	83	Motion to Seal 81 <i>Apple's Opposition to Defendant's Motion to Dismiss</i> and 82 <i>Declaration</i> by Plaintiff Apple Inc. Motions referred to Magistrate Judge Stephen L. Crocker. (Peterson, James) Modified docket relationship on 5/2/2011. (mmo) (Entered: 04/29/2011)
05/02/2011	84	** TEXT ONLY ORDER ** ORDER granting 83 Motion to Seal by Plaintiff Apple Inc. Signed by Magistrate Judge Stephen L. Crocker on 5/2/2011. (arw) (Entered: 05/02/2011)
05/02/2011	85	ORDER denying 3 Motion for Preliminary Injunction by Plaintiff Apple Inc. Counsel are to advise the court by 5/6/2011 whether they want a scheduling conference to discuss the reorganization of case 10-cv-662-bbc and other scheduling matters. Signed by District Judge Barbara B. Crabb on 4/29/2011. (arw) (Entered: 05/02/2011)
05/06/2011	86	Response re: 85 Order on Motion for Preliminary Injunction, by Plaintiff Apple Inc. (Peterson, James) (Entered: 05/06/2011)
05/06/2011	87	Response re: 85 Order on Motion for Preliminary Injunction, by Defendant Motorola Mobility, Inc. (Nelson, David) (Entered: 05/06/2011)

05/09/2011		Reorganization of case 10-cv-662-bbc and other scheduling matters; briefing completed. (arw) (Entered: 05/09/2011)
05/09/2011	88	Brief in Reply by Defendant Motorola Mobility, Inc. in Support of 33 Motion to Dismiss (Attachments: # 1 Exhibit Appendix A - Excerpt from 4-26-11 Hearing Tr.) (Nelson, David) (Entered: 05/09/2011)
05/09/2011	89	Certificate of Service by Defendant Motorola Mobility, Inc. (Nelson, David) (Entered: 05/09/2011)
05/10/2011		Set Status and Scheduling Conference: Telephone Status Conference set for 5/19/2011 at 10:00 AM before District Judge Barbara B. Crabb. Counsel for Plaintiff responsible for setting up the call to chambers at (608) 264-5447. (arw/skv) (Entered: 05/10/2011)
05/16/2011	90	Transcript of Motion Hearing, held 4/26/2011 before Judge Barbara B. Crabb. Court Reporter: CS. Please review the court policy regarding electronic transcripts: see Electronic Transcript Instructions and Notice of Intent to Request Redaction . (arw) (Entered: 05/16/2011)
05/16/2011	91	Transcript of Motion Hearing (Sealed Excerpts) held on 4/26/2011 before Judge Barbara B. Crabb. Court Reporter: CS. Please review the court policy regarding electronic transcripts: see Electronic Transcript Instructions and Notice of Intent to Request Redaction . (Attachments: # 1 Sealed Excerpt - Page 12, # 2 Sealed Excerpt - Page 20, # 3 Sealed Excerpt - Page 21, # 4 Sealed Excerpt - Pages 41-55, # 5 Sealed Excerpt - Page 75, # 6 Sealed Excerpt - Page 76, # 7 Sealed Excerpt - Page 81, # 8 Sealed Excerpt - Page 100, # 9 Sealed Excerpt - Page 104) (Sealed Document) (arw) (Entered: 05/16/2011)
05/19/2011		Minute Entry for proceedings held before District Judge Barbara B. Crabb: Telephone Status Conference held on 5/19/2011 [:20] (Court Reporter ls.) (skv) (Entered: 05/19/2011)
06/01/2011		Notice to Counsel: Telephonic Pretrial Conference set for 6/2/2011 is canceled. (arw) (Entered: 06/01/2011)
06/02/2011	92	Notice by Plaintiff Apple Inc. re: 33 MOTION TO DISMISS - <i>Notice of Decision in Related Case</i> . (Attachments: # 1 Exhibit A - Order on Motions to Dismiss) (Peterson, James) (Entered: 06/02/2011)

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06/07/2011	93	ORDER granting in part and denying in part 33 Motion to Dismiss, denying 39 Motion to Sever and Consolidate. Plaintiff's claim of waiver is dismissed for failure to state a claim upon which relief may be granted. Signed by District Judge Barbara B. Crabb on 6/7/2011. (arw) (Entered: 06/07/2011)
06/07/2011	94	ORDER denying as moot 37 Motion to Strike 5 Affidavit of Richard Lutton. Signed by District Judge Barbara B. Crabb on 6/7/2011. (arw) (Entered: 06/07/2011)
06/09/2011		Set Pretrial Conference: Telephone Pretrial Conference set for 7/14/2011 at 1:30 PM before Magistrate Judge Stephen L. Crocker. Counsel for Plaintiff responsible for setting up the call to chambers at (608) 264-5153. Standing Order Governing Preliminary Pretrial Conference attached. (arw) (Entered: 06/09/2011)
06/22/2011		Reset Pretrial Conference: Telephone Pretrial Conference reset for 7/21/2011 at 1:30 PM to accommodate the court's calendar. Counsel for Plaintiff responsible for setting up the call to chambers at (608) 264-5153. Standing Order Governing Preliminary Pretrial Conference attached. (arw) (Entered: 06/22/2011)
06/23/2011	95	Stipulated Motion for Extension of Time to File Answer re 1 Notice of Removal, <i>Counterclaims</i> by Defendant Motorola Mobility, Inc.. Motions referred to Magistrate Judge Stephen L. Crocker. Response due 6/30/2011. (Stathas, Lynn) (Entered: 06/23/2011)
06/24/2011	96	** TEXT ONLY ORDER ** ORDER granting 95 Stipulated Motion for Extension of Time to File Answer by Defendant Motorola Mobility, Inc. Signed by Magistrate Judge Stephen L. Crocker on 6/24/2011. (arw) (Entered: 06/24/2011)
06/24/2011	97	Notice of Withdrawal of Counsel by Plaintiff Apple Inc. <i>as to Penny P. Reid</i> . (Peterson, James) (Entered: 06/24/2011)
07/01/2011	98	ANSWER with Jury Demand, COUNTERCLAIM against Apple Inc. by Motorola Mobility, Inc. (Cannon, Brian) Modified on 7/5/2011 (mmo). (Entered: 07/01/2011)
07/08/2011	99	Notice by Plaintiff Apple Inc. <i>of Change of Address as to Attorneys Matthew D. Powers and Steven S. Cherensky</i> . (Peterson, James) (Entered: 07/08/2011)
07/18/2011	100	Disregard; refiled as entry 101 with exhibit attached. Modified on 7/21/2011. (mmo) (Entered: 07/18/2011)
07/20/2011	101	Corrected Joint Preliminary Pretrial Conference Report by Plaintiff Apple Inc., Counter Defendant Apple Inc., Counter Claimant Motorola Mobility, Inc., Defendant Motorola Mobility, Inc. (Attachments:

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		# 1 Exhibit Cross Use Agreement 745) (Peterson, James) (Entered: 07/20/2011)
07/21/2011		Minute Entry for proceedings held before Magistrate Judge Stephen L. Crocker: Telephone Preliminary Pretrial Conference held on 7/21/2011 [:07] (cak) (Entered: 07/21/2011)
07/22/2011	102	Pretrial Conference Order: Amendments to the Pleadings due 10/6/2011. Dispositive Motions due 2/21/2012. Settlement Letters due 9/28/2012. Rule 26(a)(3) Disclosures and Motions in Limine due 9/28/2012. Responses to Motions due 10/12/2012. Final Pretrial Conference set for 10/25/2012 at 4:00 PM. Jury Selection and Trial set for 11/5/2012 at 9:00 AM. Signed by Magistrate Judge Stephen L. Crocker on 7/22/2011. (arw) (Entered: 07/22/2011)
07/25/2011	103	Answer to Motorola Mobility, Inc.'s Counterclaims by Plaintiff Apple Inc., Counter Defendant Apple Inc. (Peterson, James) Modified event wording on 7/26/2011. (mmo) (Entered: 07/25/2011)
09/01/2011	104	Motion to Admit David Elihu Pro Hac Vice by Defendant Motorola Mobility, Inc. Motions referred to Magistrate Judge Stephen L. Crocker. (Frihart Kennedy, Rebecca) (Entered: 09/01/2011)
09/01/2011	105	Declaration of David Elihu filed by Defendant Motorola Mobility, Inc. re: 104 Motion to Admit Pro Hac Vice (Attachments: # 1 Exhibit ECF Registration Form) (Frihart Kennedy, Rebecca) (Entered: 09/01/2011)
09/12/2011	106	** TEXT ONLY ORDER ** ORDER granting 104 Motion to Admit David Elihu Pro Hac Vice. Signed by Magistrate Judge Stephen L. Crocker on 9/12/2011. (arw) (Entered: 09/12/2011)
09/26/2011	107	Motion to Withdraw as Attorney <i>and Notice of Withdrawal as Counsel by Godfrey & Kahn, S.C.</i> by Plaintiff Apple Inc., Counter Defendant Apple Inc. Response due 10/3/2011. (Peterson, James) (Entered: 09/26/2011)
09/27/2011	108	** TEXT ONLY ORDER ** ORDER granting 107 Motion to Withdraw as Attorney <i>and Notice of Withdrawal as Counsel by Godfrey & Kahn, S.C.</i> Signed by Magistrate Judge Stephen L. Crocker on 9/27/2011. (arw) (Entered: 09/27/2011)
10/05/2011	109	Notice of Appearance filed by Catherine Cetrangolo for Plaintiff Apple Inc., Counter Defendant Apple Inc. (Cetrangolo, Catherine) (Entered: 10/05/2011)
10/06/2011	110	AMENDED COMPLAINT against Motorola Mobility, Inc. (<u>Sealed Document</u>), filed by Apple Inc.. (Ernst, Samuel) (Entered: 10/06/2011)

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10/24/2011	111	ANSWER to Amended Complaint, COUNTERCLAIM by Defendant Motorola Mobility, Inc. (Cannon, Brian) Modified on 10/25/2011 (mmo). (Entered: 10/24/2011)
10/25/2011	112	Joint Motion to Modify the Case Schedule by Plaintiff Apple Inc. Response due 11/1/2011. (Ernst, Samuel) (Entered: 10/25/2011)
10/27/2011	113	Motion for Issuance of Letters of Request by Plaintiff Apple Inc. Motions referred to Magistrate Judge Stephen L. Crocker. Response due 11/3/2011. (Ernst, Samuel) (Entered: 10/27/2011)
10/27/2011	114	Brief in Support of 113 Motion for Issuance of Letters of Request by Plaintiff Apple Inc. (Ernst, Samuel) (Entered: 10/27/2011)
10/27/2011	115	Declaration of Samuel F. Ernst filed by Plaintiff Apple Inc. re: 113 Motion for Issuance of Letters of Request (Attachments: # 1 Ex. 1 - July 25, 2011 Letter to ETSI, # 2 Ex. 2 - August 1, 2011 Letter to ETSI, # 3 Ex. 3 - 18 U.S.C.A. § 1781) (Ernst, Samuel) (Entered: 10/27/2011)
10/27/2011	116	Notice by Plaintiff Apple Inc. re 113 Motion for Issuance of Letters of Request <i>Proposed Order Issuing Letter of Request</i> . (Attachments: # 1 Ex. A - Request for International Judicial Assistance, # 2 Ex. B - Instructions, # 3 Ex. C - Table: BEG Production Number, End Production Number) (Ernst, Samuel) Modified exhibit descriptions on 10/31/2011. (mmo) (Entered: 10/27/2011)
11/02/2011	117	** TEXT ONLY ORDER ** The parties' joint motion to modify the case schedule 112 is accepted and entered with one change: the deadline for filing summary judgment motions shall be extended only to April 27, 2012. Any additional extension of this deadline would jeopardize the court's ability to provide a timely ruling before trial. Signed by Magistrate Judge Stephen L. Crocker on 11/2/2011. (arw) (Entered: 11/02/2011)
11/10/2011	118	ORDER granting 113 Motion for Issuance of Letters of Request by Plaintiff Apple Inc. Signed by District Judge Barbara B. Crabb on 11/9/2011. (Attachments: # 1 Request for International Judicial Assistance) (arw) (Entered: 11/10/2011)
11/17/2011	119	Reply to Counterclaim by Plaintiff Apple Inc., Counter Defendant Apple Inc. (Haslam, Robert) (Entered: 11/17/2011)
11/30/2011	120	Joint Stipulation for Documentary Evidence by Plaintiff Apple Inc. (Haskett, Christine) (Entered: 11/30/2011)
12/01/2011	121	** TEXT ONLY ORDER **

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		ORDER accepting and entering 120 Joint Stipulation for Documentary Evidence. Signed by Magistrate Judge Stephen L. Crocker on 12/1/2011. (arw) (Entered: 12/01/2011)
02/23/2012	122	ORDER of Recusal. Magistrate Judge Stephen L. Crocker recused, case reassigned for referral purposes to Magistrate Judge Peter Oppeneer. Signed by Magistrate Judge Stephen L. Crocker on 2/23/2012. (arw) (Entered: 02/23/2012)
03/23/2012	123	Motion to Admit Cortlin Hall Lannin Pro Hac Vice. (Pro Hac Vice Fee \$50, receipt number 0758-954907) by Plaintiff Apple Inc. Motions referred to Magistrate Judge Peter A. Oppeneer. (Lannin, Cortlin) (Entered: 03/23/2012)
03/26/2012	124	** TEXT ONLY ORDER ** ORDER granting 123 Motion to Admit Cortlin Hall Lannin Pro Hac Vice. Signed by Magistrate Judge Peter Oppeneer on 3/26/2012. (arw) (Entered: 03/26/2012)
03/26/2012	125	Joint Motion for Extension of Time by Plaintiff Apple Inc., Defendant Motorola Mobility, Inc. Motions referred to Magistrate Judge Peter A. Oppeneer. (Attachments: # 1 Exhibit 1 - Order of March 14, 2012 (Northern District of Illinois Case No 11-cv-8540) (Stathas, Lynn) (Entered: 03/26/2012)
03/27/2012	126	Motion to Admit Stephen William Rodger Pro Hac Vice. (Pro Hac Vice Fee \$50, receipt number 0758-955987) by Plaintiff Apple Inc., Counter Defendant Apple Inc. Motions referred to Magistrate Judge Peter A. Oppeneer. (Rodger, Stephen) (Entered: 03/27/2012)
03/27/2012	127	** TEXT ONLY ORDER ** ORDER granting 126 Motion to Admit Stephen William Rodger Pro Hac Vice. Signed by Magistrate Judge Peter Oppeneer on 3/27/2012. (arw) (Entered: 03/27/2012)
03/27/2012	128	Notice by Plaintiff Apple Inc. <i>Notice of Attorney Name Change</i> . (Schmidt, Jill) (Entered: 03/27/2012)
03/28/2012	129	Motion to Admit Deborah Ann Garza Pro Hac Vice. (Pro Hac Vice Fee \$50, receipt number 0758-956861) by Plaintiff Apple Inc., Counter Defendant Apple Inc. Motions referred to Magistrate Judge Peter A. Oppeneer. (Garza, Deborah) (Entered: 03/28/2012)
03/28/2012	130	** TEXT ONLY ORDER ** ORDER granting 129 Motion to Admit Deborah Ann Garza Pro Hac Vice. Signed by Magistrate Judge Peter Oppeneer on 3/28/2012. (arw) (Entered: 03/28/2012)
03/28/2012	131	Motion to Admit Shawna Marie Reeder Pro Hac Vice. (Pro Hac Vice

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		Fee \$50, receipt number 0758-957487) by Counter Claimant Motorola Mobility, Inc., Defendant Motorola Mobility, Inc. Motions referred to Magistrate Judge Peter A. Oppeneer. (Reeder, Shawna) (Entered: 03/28/2012)
04/02/2012	132	** TEXT ONLY ORDER ** ORDER granting 125 Joint Motion for Extension of Time by Plaintiff Apple Inc., Defendant Motorola Mobility, Inc. Signed by Magistrate Judge Peter Oppeneer on 3/30/2012. (arw) (Entered: 04/02/2012)
04/02/2012	133	** TEXT ONLY ORDER ** ORDER granting 131 Motion to Admit Shawna Marie Reeder Pro Hac Vice. Signed by Magistrate Judge Peter Oppeneer on 4/2/2012. (arw) (Entered: 04/02/2012)
04/17/2012	134	Motion to Admit Jason Raofield Pro Hac Vice. (Pro Hac Vice Fee \$50, receipt number 0758-967968) by Plaintiff Apple Inc. Motions referred to Magistrate Judge Peter A. Oppeneer. (Raofield, Jason) (Entered: 04/17/2012)
04/19/2012	135	** TEXT ONLY ORDER ** ORDER granting 134 Motion to Admit Jason Raofield Pro Hac Vice. Signed by Magistrate Judge Peter Oppeneer on 4/19/2012. (arw) (Entered: 04/19/2012)
04/27/2012	136	Deposition of Tyler Brown taken on June 28, 2011 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 04/27/2012)
04/27/2012	137	Deposition of Richard Holleman taken on April 20, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 04/27/2012)
04/27/2012	138	Deposition of Richard Holleman taken on June 7, 2011 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 04/27/2012)
04/27/2012	139	Deposition of John Phillips taken on November 4, 2011 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 04/27/2012)
04/27/2012	140	Deposition of Jeffrey Smolinske taken on August 19, 2011 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 04/27/2012)
04/27/2012	141	Deposition of Dominic Tolli taken on August 9, 2011 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 04/27/2012)
04/27/2012	142	Deposition of Nicholas Whinnett taken on June 7, 2011 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 04/27/2012)
04/27/2012	143	MOTION FOR PARTIAL SUMMARY JUDGMENT by Plaintiff Apple Inc. Brief in Opposition due 5/18/2012. Brief in Reply due 5/29/2012. (Ernst, Samuel) (Entered: 04/27/2012)
04/27/2012	144	Brief in Support of 143 Motion for Partial Summary Judgment by

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		Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 04/27/2012)
04/27/2012	145	Proposed Findings of Fact filed by Plaintiff Apple Inc. re: 143 Motion for Partial Summary Judgment (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 04/27/2012)
04/27/2012	146	Declaration of Professor Philippe Delebecque filed by Plaintiff Apple Inc. re: 143 Motion for Partial Summary Judgment (<u>Sealed Document</u>) (Attachments: # 1 Ex. A, Part 1 - Expert Report of Professor Philippe Delebecque and Exhibits - refiled as 159 , # 2 Ex. A, Part 2 - Expert Report of Professor Philippe Delebecque and Exhibits) (Ernst, Samuel) Modified on 4/30/2012; requested attorney refile Expert Report as separate document with exhibits attached separately and described. (mmo) (Entered: 04/27/2012)
04/27/2012	147	Declaration of Cortlin H. Lannin filed by Plaintiff Apple Inc. re: 143 Motion for Partial Summary Judgment (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 04/27/2012)
04/27/2012	148	Exhibit to 147 Declaration filed by Apple Inc. <i>Exhibits 1-30 to the Declaration of Cortlin Lannin</i> (<u>Sealed Document</u>) (Attachments: # 1 Ex. 1 - Exhibit 2 to Motorola's Expert Report of Tim Williams, served on April 15, 2012, # 2 Ex. 2 - Exhibit C to Motorola's Infringement contentions in Case No. 11-cv-08540 (N.D. Ill), # 3 Ex. 3 - letter dated April 8, 2003, MOTO-APPLE-0004802652-MOTO-APPLE-0004802657, # 4 Ex. 4 - Exhibit B to Motorola's Infringement contentions in Case No. 11-cv-08540 (N.D. Ill), # 5 Ex. 5 - Exhibit 2 to Motorola's Expert Report of J. Stevenson Kenney ('559), # 6 Ex. 6 - letter dated December 20, 2002, bearing production nos. MOTO-APPLE-006037953_91873, # 7 Ex. 7 - Motorola's Expert Report of J. Stevenson Kenney ('697), # 8 Ex. 8 - Exhibit 2 to Motorola's Expert Report of Kevin Almeroth ('516), # 9 Ex. 9 - Exhibit D to Motorola's Infringement contentions in Case No. 11-cv-08540 (N.D. Ill), # 10 Ex. 10 - Exhibit F to Motorola's Infringement contentions in Case No. 11-cv-08540 (N.D. Ill), # 11 Ex. 11 - Motorola's Expert Report of Kevin Almeroth ('223), # 12 Ex. 12 - Motorola's Responses to Apple's First Set of Requests for Admission, served in In the Matter of Certain Wireless Communication Devices, Portable Music and Data Processing Devices, Computers and Components Thereof, ITC Inv. No. 337-TA-745 (U.S.I.T.C.),

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		<p># 13 Ex. 13 - Exhibit E to Motorola's Infringement contentions in Case No. 11-cv-08540 (N.D. Ill),</p> <p># 14 Ex. 14 - ETSI Rules of Procedure dated November 18, 1997, bearing production nos. WI-Apple1711250-54,</p> <p># 15 Ex. 15 - ETSI Rules of Procedure dated November 2, 2000, bearing production nos. WI-Apple1711350-55,</p> <p># 16 Ex. 16 - ETSI Rules of Procedure dated November 21, 2001, bearing production nos. WI-Apple1711404-09,</p> <p># 17 Ex. 17 - ETSI Rules of Procedure dated November 30, 2004, bearing production nos. WI-Apple1711599-1604,</p> <p># 18 Ex. 18 - ETSI Rules of Procedure dated November 23, 2005, bearing production nos. WI-Apple1604129-34,</p> <p># 19 Ex. 19 - ETSI Rules of Procedure dated November 22, 2006, bearing production nos. WI-Apple1711659-64,</p> <p># 20 Ex. 20 - ETSI Rules of Procedure dated March 29, 2007, bearing production nos. WI-Apple1711690-95,</p> <p># 21 Ex. 21 - ETSI Rules of Procedure dated November 26, 2008, bearing production nos. WI-Apple1711791-1801,</p> <p># 22 Ex. 22 - ETSI Rules of Procedure dated April 8, 2009, bearing production nos. WI-Apple0034369-79,</p> <p># 23 Ex. 23 - IEEE Standards Board Bylaws dated December 1993 and December 1994, bearing production nos. IEEE-APP-ITC-000190-222,</p> <p># 24 Ex. 24 - IEEE Standards Board Bylaws dated December 1995, December 1996, and December 2000, bearing production nos. IEEE-APP-ITC-000223-000272,</p> <p># 25 Ex. 25 - IEEE Standards Board Bylaws dated January 1998 and January 1999, bearing production nos. IEEE-APP-ITC-000334-000365,</p> <p># 26 Ex. 26 - IEEE Standards Board Bylaws dated January 2005, bearing production nos. IEEE-APP-ITC-000374-000396,</p> <p># 27 Ex. 27 - IEEE Standards Board Bylaws dated October 1999, bearing production nos. IEEE-APP-ITC-000433-000449,</p> <p># 28 Ex. 28 - Letter dated March 1, 1994, bearing production nos. MOTO-APPLE-0006200362_00028848,</p> <p># 29 Ex. 29 - Motorola, Inc.'s First Amended Answer, Affirmative Defenses, and Counterclaims to Wi-LAN, Inc.'s Third Amended Complaint, Wi-LAN, Inc. v. Research in Motion Corp., et al., Case No. 08-cv-247 (E.D. Tex.), dated April 16, 2010,</p> <p># 30 Ex. 30 - Order in Microsoft Corp. v. Motorola, Inc., --- F. Supp. 2d ---, 2012 WL 627989 (W.D. Wash.) (Ernst, Samuel) (Entered: 04/27/2012)</p>
04/27/2012	149	<p>Exhibit to 147 Declaration filed by Apple Inc. <i>Exhibits 31-50 to the Declaration of Cortlin Lannin (Sealed Document)</i> (Attachments: # 1 Ex. 31 - Declaration of John Phillips (and exhibits thereto), submitted by Plaintiff Apple Inc. in Case No. 10-cv-662, # 2 Ex. 32 - '898 patent, bearing production nos. MOTO-APPLE-</p>

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0002885884-89,
[3](#) Ex. 33 - a proposal entitled "Countdown Value definition" dated November 10-14, 1997 and bearing production nos. WI-Apple0129750-53,
[4](#) Ex. 34 - U.S. Provisional Application No. 60/057,327 and bearing production nos. WI-Apple0129856-75,
[5](#) Ex. 35, part 1 - ETSI TS 144 060 technical specification, dated April 2001 and bearing production nos. WI-Apple1684534-860,
[6](#) Ex. 35, part 2 - ETSI TS 144 060 technical specification, dated April 2001 and bearing production nos. WI-Apple1684534-860,
[7](#) Ex. 35, part 3 - ETSI TS 144 060 technical specification, dated April 2001 and bearing production nos. WI-Apple1684534-860,
[8](#) Ex. 35, part 4 - ETSI TS 144 060 technical specification, dated April 2001 and bearing production nos. WI-Apple1684534-860,
[9](#) Ex. 35, part 5 - ETSI TS 144 060 technical specification, dated April 2001 and bearing production nos. WI-Apple1684534-860,
[10](#) Ex. 35, part 6 - ETSI TS 144 060 technical specification, dated April 2001 and bearing production nos. WI-Apple1684534-860,
[11](#) Ex. 35, part 7 - ETSI TS 144 060 technical specification, dated April 2001 and bearing production nos. WI-Apple1684534-860,
[12](#) Ex. 36 - document entitled "Proposal for RACH Preambles" dated July 13-16, 1999 and bearing production nos. 745-Apple7255199-224,
[13](#) Ex. 37, part 1 - '559 patent file history and patent,
[14](#) Ex. 37, part 2 - '559 patent file history and patent,
[15](#) Ex. 38 - the TS 25.213 V3.2.0 technical specification, dated March 2000 and bearing production nos. 745-Apple-7255594-619,
[16](#) Ex. 39 - letter dated September 20, 2002 and bearing production nos. MOTO-APPLE-0004802613,
[17](#) Ex. 40 - '697 patent, bearing production nos. MOTO-APPLE-0001613466-73,
[18](#) Ex. 41 - a proposal dated January 26, 1998 and bearing production nos. MOTO-APPLE-0004111028-033,
[19](#) Ex. 42 - a proposal dated March 4-6, 1998 and bearing production nos. MOTO-APPLE-0004110874-879,
[20](#) Ex. 43 - an article bearing production nos. MOTO-APPLE-0004111178-182,
[21](#) Ex. 44 - TS 25.213 V3.1.1 technical specification, dated December 1999 and bearing production nos. 745-Apple7255696-721,
[22](#) Ex. 45 - letter dated January 26, 1998, bearing production nos. MOTO-APPLE-0006037953_91891,
[23](#) Ex. 46 - the ETSI Guide on IPRs, dated January 25, 2007 and bearing production nos. WI-Apple1604135-57,
[24](#) Ex. 47 - ETSI Guide on IPRs, dated November 27, 2008 and bearing production nos. MOTO-APPLE-0007191997-2014,
[25](#) Ex. 48 - Motorola's Responses to Apple Inc.'s First Set of Requests

		for Admission in this litigation, dated August 18, 2011, # 26 Ex. 49 - International Application Published Under the Patent Cooperation Treaty, International Publication No. WO 99/038337, # 27 Ex. 50 - European Patent Specification No. EP 1053613) (Ernst, Samuel) (Entered: 04/27/2012)
04/27/2012	150	MOTION FOR SUMMARY JUDGMENT by Defendant Motorola Mobility, Inc. Brief in Opposition due 5/18/2012. Brief in Reply due 5/29/2012. (Cannon, Brian) (Entered: 04/27/2012)
04/27/2012	151	Brief in Support of 150 Motion for Summary Judgment by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Cannon, Brian) (Entered: 04/27/2012)
04/27/2012	152	Proposed Findings of Fact filed by Defendant Motorola Mobility, Inc. re: 150 Motion for Summary Judgment (<u>Sealed Document</u>) (Cannon, Brian) (Entered: 04/27/2012)
04/27/2012	153	Declaration of Meghan E. Bordonaro filed by Defendant Motorola Mobility, Inc. re: 150 Motion for Summary Judgment (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1: Response to Apple's 1st Set of RFA's, # 2 Exhibit 2: fax to Karl Heinz Rosenbrock from Kirk W. Dailey, dated January 26, 1998,, # 3 Exhibit 3: Motorola's ETSI IPR Information Statement and Licensing Declaration with regards to GPRS, dated April 8, 2003, # 4 Exhibit 4: Motorola's letter to ETSI regarding ETSI Telecom Standards - UMTS 3GPP, dated December 20, 2002, # 5 Exhibit 5: Motorola's IEEE 802.11 Intellectual Property Statement, dated March 1, 1994, # 6 Exhibit 6: excerpts from the deposition transcript of David C. Andrus, deposed in Inv. No. 337-TA-745 on May 6, 2011, # 7 Exhibit 7: excerpts from the deposition transcript of David Singer, deposed in Inv. No. 337-TA-745 on May 13, 2011, # 8 Exhibit 8: excerpts from the deposition transcript of Neill Taylor, deposed in Inv. No. 337-TA-745 on June 8, 2011, # 9 Exhibit 9: Motorola's Licensing Agreement History, # 10 Exhibit 10: Kirk W. Dailey Declaration in Support of Motorola Mobility, Inc.'s Opposition to Apple Inc.'s Motion for Preliminary Injunction, filed on 4/8/2011, # 11 Exhibit 11: licensing agreement between Motorola and Ericsson, # 12 Exhibit 12: licensing agreement between Motorola and Ericsson, # 13 Exhibit 13: licensing agreement between Motorola and Ericsson, # 14 Exhibit 14: licensing agreement between Motorola and Ericsson, # 15 Exhibit 15: licensing agreement between Motorola and Nokia, # 16 Exhibit 16: licensing agreement between Motorola and Nokia, # 17 Exhibit 17: licensing agreement between Motorola and Nokia,

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[18](#) Exhibit 18: licensing agreement between Motorola and Samsung,
[19](#) Exhibit 19: licensing agreement between Motorola and Samsung,
[20](#) Exhibit 20: licensing agreement between Motorola and HTC,
[21](#) Exhibit 21: licensing agreement between Motorola and RIM,
[22](#) Exhibit 22: licensing agreement between Motorola and RIM,
[23](#) Exhibit 23: licensing agreement between Motorola and RIM,
[24](#) Exhibit 24: licensing agreement between Motorola and LG,
[25](#) Exhibit 25: licensing agreement between Motorola and LG,
[26](#) Exhibit 26: certified transcript of the hearing on Apple's Motion for Preliminary Injunction in this case, held before this Court on April 26, 2011,
[27](#) Exhibit 27: excerpts from the deposition transcript of Greg Joswiak, deposed in N.D. Ill. No. 11-cv-08540 on April 24, 2012,
[28](#) Exhibit 28: excerpts from the deposition transcript of Richard Joseph Lutton, Jr., deposed in Inv. No. 337-TA-745 and Inv. No. 337-TA-750 on July 8, 2011.,
[29](#) Exhibit 29: PA Consulting Group report entitled Essential Intellectual Property in 3GPP-FDD, dated May, 2006,
[30](#) Exhibit 30: PA Consulting Group report entitled Essential Intellectual Property in GSM, dated June, 2006,
[31](#) Exhibit 31: excerpts from the deposition transcript of Kirk W. Dailey, deposed in Inv. No. 337-TA-745 on April 12, 2011,
[32](#) Exhibit 32: excerpts from the deposition transcript of Richard Lutton, deposed in W.D. Wis. No. 10-CV-662 on April 1, 2011,
[33](#) Exhibit 33: Expert Report of Jerry A. Hausman, dated May 6, 2011,
[34](#) Exhibit 34: excerpts of the Initial Determination on Violation of Section 337 and Recommended Determination on Remedy and Bond issued in ITC Inv. No. 337-TA-745 on April 24, 2012,
[35](#) Exhibit 35: letter from Mark G. Davis, counsel for Apple, to Alexander Rudis, dated July 20, 2011,
[36](#) Exhibit 36: Expert Report of Brian W. Napper, dated March 6, 2012,
[37](#) Exhibit 37: excerpts from the Expert Report of Dennis W. Carlton, Ph.D., dated March 6, 2012,
[38](#) Exhibit 38: Apple Inc.'s 2nd Supplemental Response to Motorola Mobility, Inc.'s First Set of Interrogatories and Objections and Responses to Motorola Mobility, Inc.'s Second Set of Interrogatories filed April 23, 2012,
[39](#) Exhibit 39: contract between Apple and Qualcomm,
[40](#) Exhibit 40: contract between Apple and Qualcomm,
[41](#) Exhibit 41: contract between Apple and Qualcomm,
[42](#) Exhibit 42: letter sent by Charlotte B. Whitaker, to Donald J. Rosenberg, dated August 6, 2007) (Cannon, Brian) Modified exhibit descriptions on 5/1/2012. (arw) Modified on 5/1/2012; expert reports are

		opposing counsel. (mmo). (Entered: 04/28/2012)
04/30/2012		Reset Briefing Deadlines re: 143 MOTION FOR PARTIAL SUMMARY JUDGMENT by Plaintiff Apple Inc., 150 MOTION FOR SUMMARY JUDGMENT by Defendant Motorola Mobility, Inc. Opposition Briefs due 5/30/2012. Reply Briefs due 6/11/2012. (arw) (Entered: 04/30/2012)
04/30/2012	154	Deposition of David Andrus taken on May 6, 2011 (<u>Sealed Document</u>) (Stathas, Lynn) (Entered: 04/30/2012)
04/30/2012	155	Deposition of Greg Joswiak taken on April 24, 2012 (<u>Sealed Document</u>) (Stathas, Lynn) (Entered: 04/30/2012)
04/30/2012	156	Deposition of Richard Joseph Lutton, Jr. taken on July 8, 2011 (<u>Sealed Document</u>) (Stathas, Lynn) (Entered: 04/30/2012)
04/30/2012	157	Deposition of David Singer taken on May 13, 2011 (<u>Sealed Document</u>) (Stathas, Lynn) (Entered: 04/30/2012)
04/30/2012	158	Deposition of Neill Taylor taken on June 8, 2011 (<u>Sealed Document</u>) (Stathas, Lynn) (Entered: 04/30/2012)
04/30/2012	159	Expert Report of Professor Philippe Delebecque by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Attachments: # 1 Ex. A - Delebeque CV, # 2 Exhibit B-ETSI Guide on IP Rights, Nov. 27, 2008, # 3 Exhibit C-ETSI Rules of Procedure, April 8, 2009, # 4 Exhibit D-ETSI Rules of Procedure, Nov. 18, 1997, # 5 Exhibit E-ETSI IPR Policy FAQs, # 6 Exhibit F-Declaration of Laurent Aynes, # 7 Exhibit G-Letter from Motorola to ETSI, April 8, 2003, # 8 Exhibit H-Droit De La Propriete Industrielle) (Ernst, Samuel) (Entered: 04/30/2012)
05/30/2012	160	Deposition of Bruce Hilton Watrous, Jr. taken on May 10, 2012 (<u>Sealed Document</u>) (Cannon, Brian) (Entered: 05/30/2012)
05/30/2012	161	Deposition of Latonia Gordon taken on July 13, 2011 (<u>Sealed Document</u>) (Cannon, Brian) (Entered: 05/30/2012)
05/30/2012	162	Deposition of Ray Warren taken on June 7, 2011 (<u>Sealed Document</u>) (Cannon, Brian) (Entered: 05/30/2012)
05/30/2012	163	Disregard - refiled as entry 172 ; Modified on 5/31/2012; requested attorney refile in compressed format. (mmo). (Entered: 05/30/2012)
05/30/2012	164	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 143 Motion for Partial Summary Judgment filed by Apple Inc. (<u>Sealed Document</u>) (Cannon, Brian) (Entered: 05/30/2012)

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05/30/2012	165	Response to Proposed Findings of Fact filed by Defendant Motorola Mobility, Inc. re: 143 Motion for Partial Summary Judgment <i>and Statement of Additional Proposed Findings of Fact (Sealed Document)</i> (Cannon, Brian) (Entered: 05/30/2012)
05/30/2012	166	Declaration of Meghan E. Bordonaro filed by Defendant Motorola Mobility, Inc. re: 143 Motion for Partial Summary Judgment (Attachments: # 1 Exhibit 35 U.S.C. 122, effective to November 28, 2000, # 2 Exhibit Excerpt of IEEE-SA Standards Board Operations Manual, # 3 Exhibit IPR Information and Declaration Statement dated October 6, 2000) (Cannon, Brian) (Entered: 05/30/2012)
05/30/2012	167	Brief in Opposition by Plaintiff Apple Inc. re: 150 Motion for Summary Judgment filed by Motorola Mobility, Inc. (<i>Sealed Document</i>) (Ernst, Samuel) (Entered: 05/30/2012)
05/30/2012	168	Supplemental Proposed Findings of Fact filed by Plaintiff Apple Inc. re: 150 Motion for Summary Judgment (<i>Sealed Document</i>) (Ernst, Samuel) (Entered: 05/30/2012)
05/30/2012	169	Response to Proposed Findings of Fact filed by Plaintiff Apple Inc. re: 150 Motion for Summary Judgment (<i>Sealed Document</i>) (Ernst, Samuel) (Entered: 05/30/2012)
05/30/2012	170	Declaration of Fabian Gonell filed by Plaintiff Apple Inc. re: 150 Motion for Summary Judgment (<i>Sealed Document</i>) (Attachments: # 1 Ex. 1 - January 11, 2011 Letter, # 2 Ex. 2 - April 25, 2001 Letter, # 3 Ex. 3 - July 14, 2011 Letter) (Ernst, Samuel) (Entered: 05/30/2012)
05/30/2012	171	Declaration of Corlin H. Lannin filed by Plaintiff Apple Inc. re: 150 Motion for Summary Judgment (<i>Sealed Document</i>) (Attachments: # 1 Ex. 1 - Motorola's Response to Microsoft's Motion for Summary Judgment in Case No. 2:10-cv-01823-JLR, # 2 Ex. 2 - Motorola's Brief in Support of Its Motion to Dismiss or Stay Apple's Antitrust and Contract Claims in Case No. 3:08-CV-0284-G (N.D. Tex.), # 3 Ex. 3 - Order Denying Rambus's Motion to Withdraw Jury Demand With Respect to Phase III of Trial, # 4 Ex. 4 - Motorola Mobility, Inc.'s Responses to Respondent Apple Inc.'s Fourth Set of Interrogatories, # 5 Ex. 5 - Motorola's Response to Apple's Proposal Re: Case No. 3:11-cv-178, # 6 Ex. 6 - Apple's First Amended Complaint in Case No. 12-cv-355 (S.D. Cal.), # 7 Ex. 7 - Notice Regarding Initial Determination on Violation of Section 337,

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		# 8 Ex. 8 - Motorola, Inc. and Motorola Mobility, Inc.'s Answer and Counterclaims to Apple Inc.'s Amended Complaint in Case No. 10-cv-662 (W.D. Wis.), # 9 Ex. 9 - Order on Summary Judgment in Case No. 11-cv-8540 (N.D. Ill.), # 10 Ex. 10 - June 22, 2007 purchase order, # 11 Ex. 11 - September 26, 2006 agreement, # 12 Ex. 12 - October 27, 2003 excerpt from agreement) (Ernst, Samuel) (Entered: 05/30/2012)
05/31/2012	172	Deposition of Richard Lutton taken on April 1, 2011 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 05/31/2012)
06/11/2012	173	Brief in Reply by Defendant Motorola Mobility, Inc. in Support of 150 Motion for Summary Judgment (<u>Sealed Document</u>) (Cannon, Brian) (Entered: 06/11/2012)
06/11/2012	174	Reply in Support of Proposed Findings of Fact filed by Defendant Motorola Mobility, Inc. re: 150 Motion for Summary Judgment (<u>Sealed Document</u>) (Cannon, Brian) (Entered: 06/11/2012)
06/11/2012	175	Response to Proposed Findings of Fact filed by Defendant Motorola Mobility, Inc. re: 150 Motion for Summary Judgment (<u>Sealed Document</u>) (Cannon, Brian) (Entered: 06/11/2012)
06/11/2012	176	Declaration of Meghan E. Bordonaro filed by Defendant Motorola Mobility, Inc. re: 150 Motion for Summary Judgment (Attachments: # 1 Exhibit Excerpt from The French Law of Contract (2d ed. 1992)) (Cannon, Brian) (Entered: 06/11/2012)
06/11/2012	177	Brief in Reply by Plaintiff Apple Inc. in Support of 143 Motion for Partial Summary Judgment (Ernst, Samuel) (Entered: 06/11/2012)
06/11/2012	178	Reply in Support of Proposed Findings of Fact filed by Plaintiff Apple Inc. re: 143 Motion for Partial Summary Judgment <i>Apple Inc.'s Reply to Motorola's Response to Apple's Proposed Findings of Fact and Response to Motorola's Additional Proposed Findings of Fact</i> (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 06/11/2012)
06/11/2012	179	Declaration of Cortlin H. Lannin filed by Plaintiff Apple Inc. <i>in Support of Reply Brief in support of Its Motion for Partial Summary Judgment</i> re: 143 Motion for Partial Summary Judgment (Attachments: # 1 Ex. 1 - IEEE Amicus Brief, # 2 Ex. 2 - Motorola's Brief in support of Motion to Dismiss Anti-trust and Contract Claims) (Ernst, Samuel) (Entered: 06/11/2012)
07/03/2012	180	Notice of Supplemental Authority by Plaintiff Apple Inc. re 143 MOTION FOR PARTIAL SUMMARY JUDGMENT . (Attachments: # 1 Exhibit 1 - Judge Posner Opinion and Order dated June 22, 2012,

		# 2 Exhibit 2 - FTC Opinion dated June 6, 2012, # 3 Exhibit 3 - Judge Koh Order dated June 30, 2012) (Ernst, Samuel) (Entered: 07/03/2012)
07/24/2012	181	Notice of Appearance filed by Stephen Andrew Swedlow for Counter Claimant Motorola Mobility, Inc., Defendant Motorola Mobility, Inc. (Swedlow, Stephen) (Entered: 07/24/2012)
07/26/2012	182	Motion to Admit Amanda Scott Williamson Pro Hac Vice. (Pro Hac Vice fee \$50, receipt number 0758-1021999) by Counter Claimant Motorola Mobility, Inc., Defendant Motorola Mobility, Inc. Motions referred to Magistrate Judge Peter Oppeneer. (Williamson, Amanda) (Entered: 07/26/2012)
07/27/2012	183	** TEXT ONLY ORDER ** ORDER granting 182 Motion to Admit Amanda Scott Williamson Pro Hac Vice. Signed by Magistrate Judge Peter A. Oppeneer on 7/27/12. (rep) (Entered: 07/27/2012)
07/30/2012	184	Motion to Admit Thomas William Cushing Pro Hac Vice. (Pro Hac Vice fee \$50, receipt number 0758-1022735) by Counter Claimant Motorola Mobility, Inc., Defendant Motorola Mobility, Inc. Motions referred to Magistrate Judge Peter A. Oppeneer. (Cushing, Thomas) (Entered: 07/30/2012)
07/31/2012	185	** TEXT ONLY ORDER ** ORDER granting 184 Motion to Admit Thomas William Cushing Pro Hac Vice. Signed by Magistrate Judge Peter Oppeneer on 7/31/2012. (arw) (Entered: 07/31/2012)
07/31/2012	186	Motion to Admit Krzysztof Bebenek Pro Hac Vice. (Pro Hac Vice fee \$ 50 receipt number 34690014869.) by Plaintiff Apple Inc.. Motions referred to Magistrate Judge Peter A. Oppeneer. (Bebenek, Krzysztof) (Entered: 07/31/2012)
07/31/2012	187	Motion to Admit Danielle Luce Goldstein Pro Hac Vice. (Pro Hac Vice fee \$ 50 receipt number 34690014869.) by Plaintiff Apple Inc.. Motions referred to Magistrate Judge Peter A. Oppeneer. (Goldstein, Danielle) (Entered: 07/31/2012)
07/31/2012	188	Motion to Admit Richard Anthony Lopez Pro Hac Vice. (Pro Hac Vice fee \$ 50 receipt number 34690014869.) by Plaintiff Apple Inc.. Motions referred to Magistrate Judge Peter A. Oppeneer. (Lopez, Richard) (Entered: 07/31/2012)
07/31/2012	189	Motion to Admit Charlin Lu Pro Hac Vice. (Pro Hac Vice fee \$ 50 receipt number 34690014869.) by Plaintiff Apple Inc.. Motions referred to Magistrate Judge Peter A. Oppeneer. (Lu, Charlin) (Entered: 07/31/2012)

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07/31/2012	190	Motion to Admit Nathan Evans Shafroth Pro Hac Vice. (Pro Hac Vice fee \$ 50 receipt number 34690014869.) by Plaintiff Apple Inc.. Motions referred to Magistrate Judge Peter A. Oppeneer. (Shafroth, Nathan) (Entered: 07/31/2012)
08/01/2012	191	** TEXT ONLY ORDER ** ORDER granting 186 , 187 , 188 , 189 and 190 , Motions to Admit Krzysztof Bebenek, Danielle Luce Goldstein, Richard Anthony Lopez, Charlin Lu and Nathan Evans Shafroth Pro Hac Vice. Signed by Magistrate Judge Peter Oppeneer on 8/1/2012. (arw) (Entered: 08/01/2012)
08/03/2012	192	Notice of Withdrawal of Counsel by Samuel F. Ernst re: Plaintiff Apple Inc. <i>as to Stephen W. Rodger</i> (Ernst, Samuel) (Entered: 08/03/2012)
08/06/2012	193	Notice of Appearance filed by Azra M. Hadzimehmedovic for Plaintiff Apple Inc., Counter Defendant Apple Inc. (Hadzimehmedovic, Azra) (Entered: 08/06/2012)
08/10/2012	194	ORDER granting in part and denying in part 150 Motion for Summary Judgment by Defendant Motorola Mobility, Inc., granting 143 Motion for Partial Summary Judgment by Plaintiff Apple Inc. Signed by District Judge Barbara B. Crabb on 8/10/2012. (arw) (Entered: 08/10/2012)
08/14/2012	195	Motion to Admit Peter John Chassman Pro Hac Vice. (Pro Hac Vice fee \$ 50 receipt number 0758-1030906.) by Defendant Motorola Mobility, Inc.. Motions referred to Magistrate Judge Peter A. Oppeneer. (Chassman, Peter) (Entered: 08/14/2012)
08/15/2012	196	** TEXT ONLY ORDER ** ORDER granting 195 Motion to Admit Peter John Chassman Pro Hac Vice. Signed by Magistrate Judge Peter A. Oppeneer on 8/15/12. (rep) (Entered: 08/15/2012)
08/16/2012	197	Motion for Protective Order <i>precluding plaintiff from taking certain depositions</i> by Defendant Motorola Mobility, Inc. (Cannon, Brian) Modified on 8/20/2012. (llj) (Entered: 08/16/2012)
08/16/2012	198	Brief in Support of 197 Motion for Protective Order by Defendant Motorola Mobility, Inc.. (Cannon, Brian) Modified event on 8/20/2012 (mmo). (Entered: 08/16/2012)
08/16/2012	199	Declaration of Amanda Williamson filed by Defendant Motorola Mobility, Inc. re: 197 Motion for Protective Order (Attachments: # 1 Exhibit 1 - Apple's First Notice of Deposition of Motorola, # 2 Exhibit 2 - Apple's Third Notice of Deposition of Motorola, # 3 Exhibit 3 - Individual Notices of Depositions, # 4 Exhibit 4 - Lopez Letter of August 13, 2012, # 5 Exhibit 5 - Bordonaro Letter of September 8,2011,

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		# 6 Exhibit 6 - US International Trade Commission Hearing Transcript from December 8, 2011, Investigation No. 337-TA-745, # 7 Exhibit 7 - Apple's Second Notice of Deposition in Investigation 337-TA-745, Topics 15 and 16, # 8 Exhibit 8 - Apple's First Notice of Deposition, # 9 Exhibit 9 - Apple's Second Notice of Deposition Investigaition 337-TA-745, Topics 1-7, 21, # 10 Exhibit 10 - Apple's Notice of Deposition to Motorola in 11-cv-8540, Topic 47) (Cannon, Brian) Modified on 8/20/2012; added exhibit numbers. (mmo). Modified on 8/20/2012 (llj). (Entered: 08/16/2012)
08/17/2012	200	Proposed Protective Order re: 101 Corrected Joint Preliminary Pretrial Conference Report <i>Relating to Deposition of Kenneth Stewart</i> by Plaintiff Apple Inc. (Ernst, Samuel) Modified on 8/20/2012; called attorney, no motion filed. (mmo). Modified on 8/20/2012. (llj) Modified docket relationship per attorney on 8/22/2012. (mmo) (Entered: 08/17/2012)
08/20/2012		Set Deadlines as to 197 Motion for Protective Order. Response due 8/24/2012. Telephone Motion Hearing set for 8/29/2012 at 10:30 AM before Magistrate Judge Peter Oppeneer. Counsel for Defendant responsible for setting up the call to chambers at 608-261-5795. (llj) (Entered: 08/20/2012)
08/20/2012	201	Notice of Appearance of <i>Paul T. Ehrlich</i> for Plaintiff Apple Inc., Counter Defendant Apple Inc. (Powers, Matthew) Modified on 8/21/2012 (llj). (Entered: 08/20/2012)
08/20/2012	202	Deposition of Howard Benn taken on May 2, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 08/20/2012)
08/20/2012	203	Deposition of Tyler Brown, Ph.D. taken on February 27, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 08/20/2012)
08/20/2012	204	Deposition of Mark Cudak taken on September 13, 2011 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 08/20/2012)
08/20/2012	205	Motion to Compel <i>Rule 30(B)(6) Depositions</i> (<u>Sealed Document</u>) by Plaintiff Apple Inc.. Motions referred to Magistrate Judge Peter A. Oppeneer. Response due 8/27/2012. (Attachments: # 1 Text of Proposed Order) (Ernst, Samuel) (Entered: 08/20/2012)
08/20/2012	206	Brief in Support of 205 Motion to Compel <i>Rule 30(B)(6) Depositions</i> by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 08/20/2012)
08/20/2012	207	Declaration of Richard Anthony Lopez filed by Plaintiff Apple Inc. re: 205 Motion to Compel (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - Motorola's Objections and Response to Apple's Second

Notice of Deposition (Aug. 6, 2012),
[2](#) Exhibit 2 - Motorola's Motion in Limine To Preclude Dr. Heegard From Testifying On Prior Art in Case No. 11-cv-8540 (N.D. Ill. May 15, 2012),
[3](#) Exhibit 3 - Motorola's Objections and Responses to Apple's Fourth Set of Request for Admissions (Nos. 519-567) (Aug. 16, 2012),
[4](#) Exhibit 4 - Motorola's Objections and Responses to Apple's Third Set of Interrogatories (No. 17) (Aug. 16, 2012),
[5](#) Exhibit 5 - Motorola's First Supplemental Objections and Responses to Apple's Second Set of Interrogatories (Nos. 9, 12-16) (Aug. 17, 2012),
[6](#) Exhibit 6 - Excerpts of deposition notices in Inv. No. 337-TA-745 (ITC) and Case No. 10-cv-662 (W.D. Wis.),
[7](#) Exhibit 7 - Expert Report of Dennis W. Carlton, Ph. D. (Mar. 6, 2012) - see [208](#) ,
[8](#) Exhibit 8 - Expert Report of Dr. Gregory K. Leonard (Apr. 15, 2012) - see [209](#) ,
[9](#) Exhibit 9 - Opinion and Order of June 22, 2012 in Case No. 11-cv-8540 (N.D. Ill.),
[10](#) Exhibit 10 - Document produced by Motorola, Bates Stamped as MOT_ITC2588020-53,
[11](#) Exhibit 11 - Document produced by Motorola, Bates Stamped as MOT_ITC2586191-208,
[12](#) Exhibit 12- Part 1 - ETSI GSM Draft Technical Specification 04.60 v2.0.0, Bates Stamped WI-178-011008-140,
[13](#) Exhibit 12- Part 2 - ETSI GSM Draft Technical Specification 04.60 v2.0.0, Bates Stamped WI-178-011008-140,
[14](#) Exhibit 12- Part 3 - ETSI GSM Draft Technical Specification 04.60 v2.0.0, Bates Stamped WI-178-011008-140,
[15](#) Exhibit 13- Part 1 - ETSI GSM Technical Specification 04.60 v6.0.0, Bates Stamped as WI-178-011141-273,
[16](#) Exhibit 13 -Part 2 - ETSI GSM Technical Specification 04.60 v6.0.0, Bates Stamped as WI-178-011141-273,
[17](#) Exhibit 13 - Part 3 - ETSI GSM Technical Specification 04.60 v6.0.0, Bates Stamped as WI-178-011141-273,
[18](#) Exhibit 14 - Document produced by Motorola, Bates Stamped as MOT_ITC1595918-23,
[19](#) Exhibit 15 - ETSI submission numbered Tdoc SMG 684/97, Bates Stamped as WI-178-011326-29,
[20](#) Exhibit 16 - U.S. Patent 6,359,898,
[21](#) Exhibit 17 - ETSI website "Contact Us" page,
[22](#) Exhibit 18 - IEEE website "Contact & Support" page,
[23](#) Exhibit 19 - e-mail from Nathan Shafroth (Aug. 15, 2012),
[24](#) Exhibit 20 - e-mail from Amanda Williamson (Aug. 17, 2012),
[25](#) Exhibit 21 - Motorola's Objections and Responses to Apple's

		Fourth Notice of Deposition (Aug. 15, 2012), # 26 Exhibit 22 - Apple's Second Notice of Deposition of Motorola (July 13, 2012), # 27 Exhibit 23 - Apple's Fourth Notice of Deposition of Motorola (July 24, 2012), # 28 Exhibit 24 - Letter Tony Lopez to Meghan Bordonaro (July 13, 2012), # 29 Exhibit 25 - e-mail from Tony Lopez (Aug. 16, 2012)) (Ernst, Samuel) Modified on 8/21/2012; requested attorney refile Expert Report, Exhibit #7, as a separate document. Exhibit #8 is opposing counsel report. (mmo). (Entered: 08/21/2012)
08/21/2012		Set/Reset Deadlines as to 205 Motion to Compel <i>Rule 30(B)(6) Depositions</i> . Telephone Motion Hearing set for 8/29/2012 at 10:30 AM before Magistrate Judge Peter Oppeneer. Counsel for Defendant responsible for setting up the call to chambers at 608-261-5795. (llj) (Entered: 08/21/2012)
08/21/2012	208	Expert Report of Dennis W. Carlton, PH. D by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 08/21/2012)
08/21/2012	209	Expert Report of Dr. Gregory K. Leonard (Motorola) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 08/21/2012)
08/23/2012	210	Deposition of Fabian Dennis Gonell taken on August 21, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 08/23/2012)
08/23/2012	211	Deposition of Justin Huang taken on March 16, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 08/23/2012)
08/23/2012	212	Brief in Opposition by Plaintiff Apple Inc. re: 197 Motion for Protective Order filed by Motorola Mobility, Inc. (<u>Sealed Document</u>) (Attachments: # 1 Text of Proposed Order) (Ernst, Samuel) (Entered: 08/23/2012)
08/23/2012	213	Declaration of Richard Anthony Lopez filed by Plaintiff Apple Inc. <i>In Support of Apple's Opposition to Motorola's Motion for Protective Order</i> re: 197 Motion for Protective Order (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 26 - e-mail from Tyler Brown (May 25, 1999), and Bates Stamped as MOTO APPLE 0007229209, # 2 Exhibit 27 - e-mail from Kevin Laird, and Bates Stamped as MOTO APPLE 0004110939-40, # 3 Exhibit 28 - e-mail from Nick Whinnett (June 18, 1998), and Bates Stamped as MOTO APPLE 0004110915-16, # 4 Exhibit 29 - ITC Prehearing and Tutorial transcript on December 8, 2011 in the Case No. 337-TA-745 (ITC), # 5 Exhibit 30 - e-mail from Amanda Williamson (August 13, 2012),

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		<p># 6 Exhibit 31 - Apple's Opposition to Motorola's Motion for Summary Judgment in Case No. 11-cv-8540 (N.D. Ill. January 9, 2012),</p> <p># 7 Exhibit 32 - letter from Raymond Warren to Justin Huang (October 26, 2007),</p> <p># 8 Exhibit 33 - e-mail from Amanda Williamson (August 6, 2012),</p> <p># 9 Exhibit 34 - Case No. 11-cv-8540 (N.D. Ill. April 16, 2012) Declaration of Colleen Robinson including exhibits,</p> <p># 10 Exhibit 35 - Exhibit 1 (Confidential GPD Standards Action list V1.6 - 10 July 98) from the Howard Benn deposition (May 2, 2012)) (Ernst, Samuel) Modified exhibit description on 8/24/2012 (mmo). (Entered: 08/23/2012)</p>
08/27/2012	214	<p>Brief in Opposition by Defendant Motorola Mobility, Inc. re: 205 Motion to Compel filed by Apple Inc. <i>Motorola Mobility, Inc.'s Response to Apple's Motion to Compel Rule 30(b)(6) Depositions (Sealed Document)</i> (Attachments: # 1 Declaration of Amanda S. Williamson, # 2 Exhibit 1 - Apple's 1st Supp Resp to Moto's 2nd Set of Rogs (No 5), # 3 Exhibit 2 - Motorola's Supplemental Response to Apple's Fourth Notice of Deposition) (Cannon, Brian) Modified on 8/28/2012; requested attorney refile Declaration as a separate document with exhibits attached separately to it and described. (mmo). (Entered: 08/27/2012)</p>
08/29/2012		<p>Minute Entry for proceedings held before Magistrate Judge Peter A. Oppeneer: Motion Hearing held on 8/29/2012 re 197 Motion for Protective Order <i>precluding plaintiff from taking certain depositions</i> filed by Motorola Mobility, Inc., 205 Motion to Compel <i>Rule 30(B)(6) Depositions (Sealed Document)</i> filed by Apple Inc. [1:00] (Court Reporter LS.) (jaf) (Entered: 08/29/2012)</p>
08/29/2012	215	<p>** TEXT ONLY ORDER **</p> <p>At an August 29, 2012 telephonic hearing, after hearing from both sides, the court denied defendant's Motion for Protective Order 197 and granted plaintiff's Motion to Compel 205 for the reasons stated on the record. Each side will bear its own costs on these motions. Signed by Magistrate Judge Peter A. Oppeneer on 8/28/2012. (jaf) (Entered: 08/29/2012)</p>
08/30/2012	216	<p>Transcript of Telephone Motion Hearing, held 8/29/2012 before Magistrate Judge Peter Oppeneer. Court Reporter: LS. Please review the court policy regarding electronic transcripts: see Electronic Transcript Instructions and Notice of Intent to Request Redaction. (arw) (Entered: 08/30/2012)</p>
08/30/2012	217	<p>Motion to Admit Matthew Daniel Robson Pro Hac Vice. (Pro Hac Vice fee \$50, receipt number 0758-1039954) by Counter Claimant Motorola</p>

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		Mobility, Inc., Defendant Motorola Mobility, Inc. Motions referred to Magistrate Judge Peter A. Oppeneer. (Robson, Matthew) (Entered: 08/30/2012)
08/31/2012	218	Motion to Strike Expert Report of Dr. Leonard Cimini (<u>Sealed Document</u>) by Defendant Motorola Mobility, Inc. Response due 9/7/2012. (Attachments: # 1 Memorandum in Support - See 232 , # 2 Declaration of Brian C. Cannon - See 238 , # 3 Exhibit 1, # 4 Exhibit 2, # 5 Exhibit 3, # 6 Exhibit 4, # 7 Exhibit 5, # 8 Exhibit 6, # 9 Exhibit 7) (Cannon, Brian) Modified on 9/4/2012; brief and declaration refiled separately. (mmo) (Entered: 08/31/2012)
08/31/2012	219	** TEXT ONLY ORDER ** ORDER granting 217 Motion to Admit Matthew Daniel Robson Pro Hac Vice. Signed by Magistrate Judge Peter Oppeneer on 8/31/2012. (arw) (Entered: 08/31/2012)
08/31/2012	220	Deposition of Leonard J. Cimini, Ph.D. taken on May 4, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 08/31/2012)
08/31/2012	221	Deposition of Gregory Leonard (Rough) taken on August 28, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 08/31/2012)
08/31/2012	222	Disregard - refiled as entry 236 . (<u>Sealed Document</u>) (Ernst, Samuel) Modified on 9/4/2012; requested attorney refile with exhibits attached separately and described. (mmo) (Entered: 08/31/2012)
08/31/2012	223	Disregard - refiled as entry 235 . (<u>Sealed Document</u>) (Ernst, Samuel) Modified on 9/4/2012; requested attorney refile with exhibits attached separately and described. (mmo) (Entered: 08/31/2012)
08/31/2012	224	Disregard - refiled as entry 234 . (<u>Sealed Document</u>) (Ernst, Samuel) Modified on 9/4/2012; wrong document attached, requested attorney refile Expert Report with exhibits attached separately and described. (mmo) (Entered: 08/31/2012)
08/31/2012	225	Disregard - refiled as entry 233 . (<u>Sealed Document</u>) (Ernst, Samuel) Modified on 9/4/2012; wrong document attached, requested attorney refile Supplemental Report with exhibits attached separately and described. (mmo) (Entered: 08/31/2012)
08/31/2012	226	Motion for Leave to Rely Upon Supplemental Expert Reports (<u>Sealed Document</u>) by Plaintiff Apple Inc. Response due 9/7/2012. (Ernst,

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		Samuel) Modified on 9/5/2012. (arw) (Entered: 08/31/2012)
08/31/2012	227	Brief in Support of 226 Motion for Miscellaneous Relief <i>Apple's Motion for Leave to Rely Upon Supplemental Expert Reports</i> by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 08/31/2012)
08/31/2012	228	Declaration of Richard Anthony Lopez filed by Plaintiff Apple Inc. re: 226 Motion for Miscellaneous Relief (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - Apple Inc.'s Supplemental Responses to Motorola's Second Set of Interrogatories (August 23, 2012), # 2 Exhibit 2 - Second Amended Complaint in Case No. 12cv00355 (S.D. Ca. Aug. 3, 2012), # 3 Exhibit 3 - Ericsson Document, Bates numbered WI-APPLE4403509-WI-APPLE4403573, # 4 Exhibit 4 - Nokia Document, excerpts of Bates numbered ATT000207-662, # 5 Exhibit 5 - Motorola's Notice of Subpoena to Third Party AT&T Inc. and AT&T Mobility LLC (Feb. 8, 2012), # 6 Exhibit 6 - Apple's Notice of Subpoena to Third Party AT&T Inc. and AT&T Mobility LLC (March 30, 2012), # 7 Exhibit 7 - E-mail from Ernst to Swedlow (Aug. 31, 2012) (Ernst, Samuel) (Entered: 08/31/2012)
09/01/2012	229	Motion to Strike 223 Supplemental Expert Report of <i>Brian Napper</i> by Defendant Motorola Mobility, Inc. Response due 9/10/2012. (Cannon, Brian) Modified docket text on 9/5/2012. (mmo) (Entered: 09/01/2012)
09/01/2012	230	Brief in Support of 229 Motion to Strike <i>Supplemental Expert Report of Brian Napper</i> by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Cannon, Brian) (Entered: 09/01/2012)
09/01/2012	231	Declaration of Meghan E. Bordonaro filed by Defendant Motorola Mobility, Inc. re: 229 Motion to Strike (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - Apple's Response to Motorola's First Notice of Deposition, # 2 Exhibit 2 - Apple's First Supplemental Response to Motorola's Interrogatory No. 5, # 3 Exhibit 3 - August 31, 2012 Email from S. Ernst to S. Swedlow) (Cannon, Brian) Modified exhibit numbers on 9/5/2012 (mmo). (Entered: 09/01/2012)
09/04/2012	232	Brief in Support of 218 Motion to Strike, <i>Motorola Mobility, Inc.'s Memorandum in Support of its Motion to Strike the Expert Report of Dr. Leonard Cimini</i> by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Attachments: # 1 Declaration of Brian Cannon - see 238 , # 2 Exhibit 1,

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		<p># 3 Exhibit 2, # 4 Exhibit 3, # 5 Exhibit 4, # 6 Exhibit 5, # 7 Exhibit 6, # 8 Exhibit 7) (Cannon, Brian) Modified on 9/5/2012; requested attorney refile Declaration as a separate document with exhibits attached separately and described. (mmo). (Entered: 09/04/2012)</p>
09/04/2012	233	<p>Supplemental Expert Report of Leonard J. Cimini, PH.D. by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit A - List of Materials Considered, # 2 Exhibit B - Search Strings re Prior Art) (Ernst, Samuel) Modified on 9/5/2012; corrected event to match document. (mmo). (Entered: 09/04/2012)</p>
09/04/2012	234	<p>Expert Report of Leonard J. Cimini, PH.D. by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit A - Items Considered, # 2 Exhibit B - Excerpts of report of Tim Williams, # 3 Exhibit C - Motorola's Notice of Subpoena to AT&T, # 4 Exhibit D - Apple's Notice of Subpoena to AT&T, # 5 Exhibit E - Custodian Declaration of H. Axelsson, # 6 Exhibit F - Custodian Declaration of D. Rawdin, # 7 Exhibit G - GSM 03.64 (WI-Apple 0530977-0531019), # 8 Exhibit H - Tdoc SMG2 GPRS 239/97 (WI-Apple 0530882-530902), # 9 Exhibit I - Tdoc SMG2 GPRS 75/95 (WI-APPLE 0531060-531073) (Ernst, Samuel) Modified on 9/5/2012; corrected event to match document. (mmo) (Entered: 09/04/2012)</p>
09/04/2012	235	<p>Supplemental Expert Report of Brian W. Napper by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit 1 - Curriculum Vitae, # 2 Exhibit 2 - Napper Testimony, # 3 Exhibit 3 - Publications, # 4 Exhibit 4 - Apple's Amended First Supplemental Responses to Motorola's 2nd Set of Interrogatories (August 23, 2012), # 5 Exhibit 5 - Invoices for the services of J. Hausman, # 6 Exhibit 6 - Invoices for the services of Compass Lexecon, # 7 Exhibit 7 - Invoices for the services of FTI Consulting/Napper, # 8 Exhibit 8 - Invoices for the services of Leonard Cimini, # 9 Exhibit 9 - Invoices for the services of Chris Heegard, # 10 Exhibit 10 - Invoices for the services of Louis Berneman/Cornerstone Research, # 11 Exhibit 11 - Invoices re California Case) (Ernst, Samuel) (Entered: 09/04/2012)</p>

09/05/2012		Reset Briefing Deadlines as to 229 Motion to Strike 223 Expert Report of Brian Napper. Brief in Opposition due 9/11/2012. (rep) (Entered: 09/05/2012)
09/05/2012	236	Expert Report of Brian W. Napper (March 6, 2012) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit 1 - Curriculum Vitae, # 2 Exhibit 2 - Previous Five Years Testimony, # 3 Exhibit 3 - Publications, # 4 Exhibit 4 - First Amended Complaint) (Ernst, Samuel) (Entered: 09/05/2012)
09/05/2012	237	Declaration of Samuel Ernst re 236 Expert Report, <i>in support of Expert Report of Brian W. Napper (March 6, 2012)</i> (Sealed Document) (Attachments: # 1 Exhibit A - summary of invoice from the law firm of Weil, Gotshal & Manges LLP in ITC Investigation Case No. 337-TA-745, # 2 Exhibit B - summary of invoice from the law firm of Covington & Burling LLP in ITC Investigation Case No. 337-TA-745, # 3 Exhibit C - summary of invoice from the law firm of Tensegrity Law Group LLP in ITC Investigation Case No. 337-TA-745, # 4 Exhibit D - summary of invoice from the law firm of Covington & Burling LLP in Wisconsin and Illinois cases, # 5 Exhibit E - summary of invoice from the law firm of Weil, Gotshal & Manges LLP in instant case, # 6 Exhibit F - summary of invoice from the law firm of Covington & Burling LLP in instant case) (Ernst, Samuel) (Entered: 09/05/2012)
09/05/2012	238	Declaration of Brian C. Cannon filed by Defendant Motorola Mobility, Inc. re: 218 Motion to Strike,, (Sealed Document) (Attachments: # 1 Exhibit 1 - March 2, 2012 Motorola Production Cover Letter, # 2 Exhibit 2 - March 30, 2012 Apple Production Cover Letter, # 3 Exhibit 3 - Joint Motion to Modify the Case Schedule, # 4 Exhibit 4 - Apple's Motion to Supplement Expert Reports (N.D. Ill.), # 5 Exhibit 5 - Order Denying in Part Apple's Motion to Supplement (N.D. Ill.), # 6 Exhibit 6 - Preliminary Pretrial Conference Order, # 7 Exhibit 7 - Expert report of Leonard J. Cimini, Ph.D. Regarding U.S. Patent No. 6,359,898) (Cannon, Brian) (Entered: 09/05/2012)
09/06/2012	239	Deposition of Gregory K. Leonard taken on August 28, 2012 (Final Transcript) (Sealed Document) (Ernst, Samuel) (Entered: 09/06/2012)
09/07/2012	240	Motion to Admit Matthew John Connolly Pro Hac Vice. (Pro Hac Vice fee \$50, receipt number 34690015217) by Plaintiff Apple Inc. Motions referred to Magistrate Judge Peter A. Oppeneer. (Connolly, Matthew)

		(Entered: 09/07/2012)
09/07/2012	241	Expert Report of Leonard J. Cimini (March 22, 2012 Rebuttal Report) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit A - List of materials considered, # 2 Exhibit B - Excerpt from the rough transcript of Tiberiu Muresan) (Ernst, Samuel) (Entered: 09/07/2012)
09/07/2012	242	Deposition of Leonard Cimini (Rough) taken on August 31, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 09/07/2012)
09/07/2012	243	Deposition of Tim Williams taken on May 8, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 09/07/2012)
09/07/2012	244	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 226 Motion for Miscellaneous Relief filed by Apple Inc. <i>Motorola's Opposition to Apple's Motion for Leave to Reply Upon Supplemental Expert Reports</i> (<u>Sealed Document</u>) (Cannon, Brian) (Entered: 09/07/2012)
09/07/2012	245	Brief in Opposition by Plaintiff Apple Inc. re: 218 Motion to Strike, filed by Motorola Mobility, Inc. <i>re: The Expert Report of Dr. Leonard Cimini</i> (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 09/07/2012)
09/07/2012	246	Declaration of Richard Anthony Lopez filed by Plaintiff Apple Inc. <i>In Support of Apple's Opposition to Motorola's Motion to Strike The Expert Report of Dr. Leonard Cimini</i> re: 218 Motion to Strike, (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - Apple's Motion to Supplement Its Expert Reports in Case No. 11-cv-08540 (N.D. Ill. Apr. 13, 2012), # 2 Exhibit 2 - Declaration of Leonard J. Cimini in Case No. 11-cv-08540 (N.D. Ill. Apr. 13, 2012) - See 247 , # 3 Exhibit 3 - Declaration of Tim A. Williams in Case No. 11-cv-08540 (N.D. Ill. May 7, 2012) (Ernst, Samuel) Modified on 9/10/2012; Error message in opening Exhibit 2; requested attorney refile. (mmo) (Entered: 09/07/2012)
09/10/2012	247	Exhibit to 246 Declaration of Richard Anthony Lopez filed by Apple Inc. <i>Ex. 2 - Declaration of Leonard J. Cimini in Case 11-cv-08540 (N.D. Ill. Apr. 13, 2012)</i> . (<u>Sealed Document</u>) (Ernst, Samuel) Modified on 9/11/2012. (arw) (Entered: 09/10/2012)
09/11/2012	248	** TEXT ONLY ORDER ** ORDER granting 240 Motion to Admit Matthew John Connolly Pro Hac Vice. Signed by Magistrate Judge Peter Oppeneer on 9/11/2012. (arw) (Entered: 09/11/2012)
09/11/2012	249	Brief in Opposition by Plaintiff Apple Inc. re: 229 Motion to Strike filed by Motorola Mobility, Inc. <i>re: The Supplemental Expert Report of Brian</i>

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		<i>Napper</i> (Sealed Document) (Ernst, Samuel) (Entered: 09/11/2012)
09/19/2012	250	Deposition of Latonia Gordon (Rough) taken on September 13, 2012 (Sealed Document) (Shafroth, Nathan) (Entered: 09/19/2012)
09/19/2012	251	Motion for Sanctions (Sealed Document) by Plaintiff Apple Inc. (Attachments: # 1 Text of Proposed Order) (Shafroth, Nathan) (Entered: 09/19/2012)
09/19/2012	252	Brief in Support of 251 Motion for Sanctions by Plaintiff Apple Inc. (Sealed Document) (Shafroth, Nathan) (Entered: 09/19/2012)
09/19/2012	253	Declaration of Nathan E. Shafroth filed by Plaintiff Apple Inc. re: 251 Motion for Sanctions (Sealed Document) (Attachments: # 1 Exhibit 1 - Apple's First Set of Requests for Production (Nos. 1-71) (July 13, 2012), # 2 Exhibit 2 - Motorola's Objections and Responses to Apple's First Set of Requests for Production (Nos. 1-71) (Aug. 16, 2012), # 3 Exhibit 3 - Motorola's Objections and Amended Responses to Apple's First Set of Requests for Production (Nos. 1-71) (Sept. 5, 2012), # 4 Exhibit 4 - E-mail from A. Williamson (Sept. 11, 2012), # 5 Exhibit 5 - E-mail from N. Shafroth (Sept. 13, 2012), # 6 Exhibit 6 - E-mail from A. Williamson (Sept. 14, 2012), # 7 Exhibit 7 - November 30, 2010 press release, "Motorola to Complete Separation on January 4, 2011", # 8 Exhibit 8 - Apple's Answer, in Inv. No. 337-TA-745 (ITC) (Dec. 1, 2010), # 9 Exhibit 9 - Nov. 18, 1997 ETSI Rules of Procedure, Annex Six, Bates Stamped as 745-Apple7256417-21, # 10 Exhibit 10 - Nov. 22, 2000 ETSI Rules of Procedure, Annex Six, Bates Stamped as 745-Apple7256411-16, # 11 Exhibit 11 - Nov. 21, 2001 ETSI Rules of Procedure, Annex Six, and Bates Stamped as 745-Apple7256422-27, # 12 Exhibit 12 - Apr. 2003 ETSI Directives and IPR Policy, Bates Stamped as 745-Apple4743298-390, # 13 Exhibit 13 - December 1993 IEEE Standards Board Bylaws, Bates Stamped as IEEE-APP-ITC-000190-206, # 14 Exhibit 14 - December 1994 IEEE Standards Board Bylaws, Bates Stamped as IEEE-APP-ITC-000207-222, # 15 Exhibit 15 - December 1995 IEEE Standards Board Bylaws, Bates Stamped as IEEE-APP-ITC-000223-39, # 16 Exhibit 16 - December 1996 IEEE Standards Board Bylaws, Bates Stamped as IEEE-APP-ITC-000240-256, # 17 Exhibit 17 - January 1998 IEEE Standards Board Bylaws, Bates Stamped as IEEE-APP-ITC-000334-50, # 18 Exhibit 18 - January 1999 IEEE Standards Board Bylaws, Bates

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		Stamped as IEEE-APP-ITC-000351-65, # 19 Exhibit 19 - October 1999 IEEE Standards Board Bylaws, Bates Stamped as IEEE-APP-ITC-000433-49, # 20 Exhibit 20 - December 2000 IEEE Standards Board Bylaws, Bates Stamped as IEEE-APP-ITC-000257-72) (Shafroth, Nathan) (Entered: 09/19/2012)
09/20/2012	254	Deposition of Leonard J. Cimini (Final Transcript) taken on August 31, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 09/20/2012)
09/21/2012		Set Briefing Deadlines re: 251 Motion for Sanctions by Plaintiff Apple Inc. Brief in Opposition due 10/3/2012. Brief in Reply due 10/15/2012. (arw/pao) (Entered: 09/21/2012)
09/24/2012	255	Unopposed Motion for Bench Trial (<u>Sealed Document</u>) by Plaintiff Apple Inc.. Response due 10/1/2012. (Ernst, Samuel) (Entered: 09/24/2012)
09/24/2012	256	Declaration of Samuel F. Ernst filed by Plaintiff Apple Inc. <i>in Support of Apple's Unopposed Motion for Bench Trial</i> re: 255 Motion for Miscellaneous Relief (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - Motorola's Supplemental Initial Disclosures (Aug. 28, 2012)) (Ernst, Samuel) (Entered: 09/24/2012)
09/25/2012	257	** TEXT ONLY ORDER ** ORDER granting 255 Unopposed Motion for Bench Trial by Plaintiff Apple Inc. The parties are to comply with the requirements of the order in non-jury cases assigned to Judge Crabb that they received following the July 21, 2011 pretrial conference before Magistrate Judge Crocker. Signed by District Judge Barbara B. Crabb on 9/25/2012. (arw) (Entered: 09/25/2012)
09/27/2012		Reset Trial Deadlines/Hearings: Court Trial set for 11/5/2012 at 9:00 AM. (arw) (Entered: 09/27/2012)
09/27/2012	258	Stipulation for the Exchange of Rule 26(A)(3) Disclosures by Plaintiff Apple Inc., Defendant Motorola Mobility, Inc. (Fram, Robert) (Entered: 09/27/2012)
09/28/2012	259	Deposition of Dwight Smith taken on August 21, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	260	Deposition of Louis Berneman taken on May 8, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	261	Deposition of Dennis Carlton taken on August 15, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	262	Deposition of Leonard Cimini taken on August 31, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 09/28/2012)

09/28/2012	263	Deposition of Brian Blasius taken on February 22, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	264	Deposition of Chris Heegard taken on September 7, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	265	Deposition of Mark Lanning taken on September 20, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	266	Motion to Admit Robert Joseph Williams Pro Hac Vice. (Pro Hac Vice fee \$50, receipt number 34690015369) by Plaintiff Apple Inc. Motions referred to Magistrate Judge Peter A. Oppeneer. (Williams, Robert) (Entered: 09/28/2012)
09/28/2012	267	Deposition of Tim Williams taken on September 21, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	268	Deposition of Ray Warren taken on September 25, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	269	Expert Report of Kevin Almeroth (dated March 22, 2012 Supplemented Rebuttal Report) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	270	Expert Report of Tim Williams Regarding U.S. Patent 6,359,898 (Apr. 15, 2012) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - Curriculum Vitae, # 2 Exhibit 2 - T. Williams Initial Expert Report (Infringement), # 3 Exhibit 3 - T. Williams Rebuttal Expert Report (Validity), # 4 Exhibit 4 - T. Williams Supplemental Initial Expert Report (Infringement), # 5 Exhibit 5 - T. Williams Supplemental Rebuttal Expert Report (Validity) (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	271	Deposition of Latonia Gordon taken on September 13, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	272	Deposition of Gregory Leonard taken on April 25, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	273	Deposition of Jean-Pierre Le Cannellier taken on May 13, 2011 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	274	Expert Report of J. Stevenson Kenney by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - Curriculum Vitae, # 2 Exhibit 2 - Initial Expert Report of J. Kenney (Infringement), # 3 Exhibit 3 - Rebuttal Expert Report of J. Kenney (Validity), # 4 Exhibit 4 - Rebuttal Expert Report of J. Kenney Regarding Expert Report of M. Lanning,

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		# 5 Exhibit 5 - Corrected Direct Witness Statement of J. Kenney, # 6 Exhibit 6 - Corrected Rebuttal Witness Statement of J. Kenney) (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	275	Expert Report of J. Stevenson Kenney (March 22, 2012 Supplemented Rebuttal Report) by Plaintiff Apple Inc. (Sealed Document) (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	276	Expert Report of Tim Williams (dated March 22, 2012 Supplemental Rebuttal Report) by Plaintiff Apple Inc. (Sealed Document) (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	277	Expert Report of Richard Holleman (dated April 15, 2012) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit 1 - Curriculum Vitae, # 2 Exhibit 2 - Declaration of R. Holleman in Support of Motorola's Opposition to Apple's Motion for Preliminary Injunction, # 3 Exhibit 3 - ND of IL - Expert Report of R. Holleman, # 4 Exhibit 4 - Rebuttal Witness Statement of R. Holleman, # 5 Exhibit 5 - Materials Considered, # 6 Exhibit 6 - 1993 ETSI IPR Policy and Undertaking, # 7 Exhibit 7 - November 1994 ETSI Interim IPR Policy, # 8 Exhibit 8 - November 11, 2011 Letter from Apple to ETSI, # 9 Exhibit 9 - March 20, 2012 Apple submission to ETSI, # 10 Exhibit 10 - October 10, 2006 ETSI IPR Review ad hoc group Report, # 11 Exhibit 11 - 2003 Report of the GA ad hoc group on ETSI's IPR Policy operation) (Ernst, Samuel) Modified exhibit description on 10/1/2012 (mmo). (Entered: 09/28/2012)
09/28/2012	278	Supplemental Expert Report of Dr. Chris Heegard by Defendant Motorola Mobility, Inc. (Sealed Document) (Attachments: # 1 Exhibit A - Materials considered) (Robson, Matthew) Modified exhibit description on 10/1/2012 (mmo). (Entered: 09/28/2012)
09/28/2012	279	Supplemental Expert Report of Dr. Chris Heegard by Defendant Motorola Mobility, Inc. (Sealed Document) (Attachments: # 1 Exhibit 1 - Materials considered) (Robson, Matthew) Modified exhibit description on 10/1/2012 (mmo). (Entered: 09/28/2012)
09/28/2012	280	Motion in Limine <i>to Preclude Apple From Seeking Specific Performance</i> (Sealed Document) by Defendant Motorola Mobility, Inc. (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	281	Brief in Support of 280 Motion in Limine <i>to Preclude Apple From Seeking Specific Performance</i> by Defendant Motorola Mobility, Inc. (Sealed Document) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	282	Declaration of Stephen A. Swedlow filed by Defendant Motorola

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		<p>Mobility, Inc. re: 280 Motion in Limine. (<u>Sealed Document</u>)</p> <p>(Attachments:</p> <p># 1 Exhibit 1 - September 19, 2012 email from R. Fram, counsel for Apple Inc., to counsel for Motorola Mobility LLC,</p> <p># 2 Exhibit 2 - ETSI's Intellectual Property Rights Policy, Annex 6 to ETSI's Rules of Procedure, dated April 8, 2009,</p> <p># 3 Exhibit 3 - Report of the GA ad hoc group on ETSI's IPR Policy Operation from ETSI's November 2003 General Assembly Meeting,</p> <p># 4 Exhibit 4 - ETSI IPR Review Ad Hoc Group Report from October 10, 2006,</p> <p># 5 Exhibit 5 - ETSI Guide on Intellectual Property Rights (IPRs) from November 27, 2008,</p> <p># 6 Exhibit 6 - Section 6 from the IEEE-SA Standards Board Bylaws, printed February 18, 2011,</p> <p># 7 Exhibit 7 - August 6, 2007 correspondence from C. Whitaker of Motorola, Inc. to D. Rosenberg of Apple Inc.,</p> <p># 8 Exhibit 8 - July 24, 2008 correspondence from R. Sonnentag of Motorola, Inc. to T. Mavrakakis of Apple Inc.,</p> <p># 9 Exhibit 9 - Agreement dated January 4, 2011,</p> <p># 10 Exhibit 10 - Agreement dated November 16, 2011) (Swedlow, Stephen) Modified on 10/1/2012. (arw) (Entered: 09/28/2012)</p>
09/28/2012	283	<p>Motion in Limine <i>to Preclude Evidence and Argument Relating to Timeliness of Patent Disclosures to ETSI</i> by Defendant Motorola Mobility, Inc. (Swedlow, Stephen) (Entered: 09/28/2012)</p>
09/28/2012	284	<p>Brief in Support of 283 Motion in Limine <i>to Preclude Evidence and Argument Relating to Timeliness of Patent Disclosures to ETSI</i> by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 09/28/2012)</p>
09/28/2012	285	<p>Declaration of Stephen A. Swedlow filed by Defendant Motorola Mobility, Inc. re: 283 Motion in Limine (Attachments:</p> <p># 1 Exhibit 1 - September 19, 2012 email from R. Fram, counsel for Apple Inc., to counsel for Motorola Mobility LLC,</p> <p># 2 Exhibit 2 - ETSI's Intellectual Property Rights Policy from November 18, 1997,</p> <p># 3 Exhibit 3 - Motorola's December 20, 2002 IPR disclosure to ETSI,</p> <p># 4 Exhibit 4 - Motorola's April 8, 2003 IPR disclosure to ETSI)</p> <p>(Swedlow, Stephen) (Entered: 09/28/2012)</p>
09/28/2012	286	<p>Motion in Limine <i>to Determine the Terms of ETSI and IEEE Policies</i> by Defendant Motorola Mobility, Inc. (Swedlow, Stephen) (Entered: 09/28/2012)</p>
09/28/2012	287	<p>Brief in Support of 286 Motion in Limine <i>to Determine the Terms of ETSI and IEEE Policies</i> by Defendant Motorola Mobility, Inc. (<u>Sealed</u></p>

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		<u>Document</u>) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	288	Declaration of Stephen A. Swedlow filed by Defendant Motorola Mobility, Inc. re: 286 Motion in Limine (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - September 19, 2012 email from R. Fram, counsel for Apple Inc., to counsel for Motorola Mobility LLC, # 2 Exhibit 2 - Apple Inc.'s Amended First Supplemental Responses to Motorola's Second Set of Interrogatories (No. 5), # 3 Exhibit 3 - ETSI's Intellectual Property Rights Policy, Annex 6 to ETSI's Rules of Procedure, dated April 8, 2009, # 4 Exhibit 4 - IEEE-SA Standards Board Bylaws, Approved by the IEEE-SA Board of Governors February 2011, # 5 Exhibit 5 - ETSI Guide on Intellectual Property Rights (IPRs) adopted on November 27, 2008, # 6 Exhibit 6 - The ETSI IPR Policy and Undertaking as approved by the ETSI General Assembly held 16th to 18th March 1993, # 7 Exhibit 7 - ETSI Interim IPR Policy to be approved by the 21st ETSI General Assembly (22-23 November 1994) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	289	Motion in Limine <i>to Preclude Evidence and Argument in Support of Apple's Frand Breach and Estoppel Claims After January 4, 2011</i> (<u>Sealed Document</u>) by Defendant Motorola Mobility, Inc. (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	290	Brief in Support of 289 Motion in Limine <i>to Preclude Evidence and Argument in Support of Apple's Frand Breach and Estoppel Claims After January 4, 2011</i> by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	291	Declaration of Stephen A. Swedlow filed by Defendant Motorola Mobility, Inc. re: 289 Motion in Limine (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1, January 2011 Agreement, # 2 Exhibit 2, November 2011 Agreement) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	292	Motion in Limine <i>to Exclude Evidence and Argument Concerning Prior Litigation Judicial Decisions Regarding the Patents-In-Suit</i> by Defendant Motorola Mobility, Inc. (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	293	Brief in Support of 292 Motion in Limine <i>to Exclude Evidence and Argument Concerning Prior Litigation Judicial Decisions Regarding the Patents-In-Suit</i> by Defendant Motorola Mobility, Inc. (Swedlow, Stephen) (Entered: 09/28/2012)

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09/28/2012	294	Declaration of Stephen A. Swedlow filed by Defendant Motorola Mobility, Inc. re: 292 Motion in Limine (Sealed Document) (Attachments: # 1 Exhibit 1 - Commission Opinion from U.S.I.T.C. Investigation No. 337-TA-745, # 2 Exhibit 2 - Motorola's December 20, 2002 IPR disclosure to ETSI, # 3 Exhibit 3 - Motorola's April 8, 2003 IPR disclosure to ETSI, # 4 Exhibit 4 - August 6, 2007 correspondence from C. Whitaker of Motorola, Inc. to D. Rosenberg of Apple Inc., # 5 Exhibit 5 - July 24, 2008 correspondence from R. Sonnentag of Motorola, Inc. to T. Mavrakakis of Apple Inc., # 6 Exhibit List of Patents, July 2011, # 7 Exhibit January 2011 Agreement) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	295	Motion in Limine <i>to Preclude Evidence and Argument Relating to Non-Parties (1) CMCS, and (2) Qualcomm</i> (Sealed Document) by Defendant Motorola Mobility, Inc. (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	296	Brief in Support of 295 Motion in Limine <i>to Preclude Evidence and Argument Relating to Non-Parties (1) CMCS, and (2) Qualcomm</i> by Defendant Motorola Mobility, Inc. (Sealed Document) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	297	Declaration of Stephen A. Swedlow filed by Defendant Motorola Mobility, Inc. re: 295 Motion in Limine (Sealed Document) (Attachments: # 1 Exhibit 1 - September 19, 2012 email from R. Fram, # 2 Exhibit 2 - 2003 Agreement, # 3 Exhibit 3 - August 4, 2007 correspondence from K. Dailey, # 4 Exhibit 4 - 2007 Agreement, # 5 Exhibit 5 - January 11, 2011 correspondence from K. Dailey) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	298	Motion in Limine <i>to Exclude Evidence and References to Irrelevant Standards and Standard Setting Bodies</i> by Defendant Motorola Mobility, Inc. (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	299	Brief in Support of 298 Motion in Limine <i>to Exclude Evidence and References to Irrelevant Standards and Standard Setting Bodies</i> by Defendant Motorola Mobility, Inc. (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	300	Declaration of Stephen A. Swedlow filed by Defendant Motorola Mobility, Inc. re: 298 Motion in Limine (Sealed Document) (Attachments: # 1 Exhibit 1 - July 2005 Presentation, # 2 Exhibit 2 - June 2005 Presentation,

		# 3 Exhibit 3 - January 2006 Report, # 4 Exhibit 4 - January 2007 Report, # 5 Exhibit 5 - April 2007 Report, # 6 Exhibit 6 - February 7, 2007 correspondence from W. Weigel, # 7 Exhibit 7 - April 19, 2007 correspondence from J. Meyer, # 8 Exhibit 8 - February 19, 2007 correspondence from W. Weigel, # 9 Exhibit 9 - August 2, 2007 correspondence from L. Gordon) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	301	Motion in Limine to Preclude the Testimony and Opinions of Mr. Louis Berneman Relating to FRAND on Rule 702 and Daubert Grounds (<u>Sealed Document</u>) by Defendant Motorola Mobility, Inc. (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	302	Brief in Support of 301 Motion in Limine to Preclude the Testimony and Opinions of Mr. Louis Berneman Relating to FRAND on Rule 702 and Daubert Grounds by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	303	Declaration of Stephen A. Swedlow filed by Defendant Motorola Mobility, Inc. re: 301 Motion in Limine (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - Expert Report of Louis P. Berneman (sans appendices), dated March 6, 2012) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	304	Motion in Limine to Preclude the Testimony and Opinions of Dr. Dennis Carlton Relating to FRAND and Market Power on Rule 702 and Daubert Grounds (<u>Sealed Document</u>) by Defendant Motorola Mobility, Inc. (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	305	Brief in Support of 304 Motion in Limine to Preclude the Testimony and Opinions of Dr. Dennis Carlton Relating to FRAND and Market Power on Rule 702 and Daubert Grounds by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	306	Declaration of Stephen A. Swedlow filed by Defendant Motorola Mobility, Inc. re: 304 Motion in Limine (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1- August 6, 2007 correspondence from C. Whitaker, # 2 Exhibit 2 - July 24, 2008 correspondence from R. Sonnentag, # 3 Exhibit 3 - Expert Reports of Brian W. Napper, dated September 14, 2011, March 1, 2012 and March 6, 2012, # 4 Exhibit 4 - 1992 Agreement) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	307	Motion in Limine to Exclude Evidence or Argument Related to Allegedly "Non-Infringing Alternatives" to Motorola Patents by

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		Defendant Motorola Mobility, Inc. (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	308	Brief in Support of 307 Motion in Limine <i>to Exclude Evidence or Argument Related to Allegedly "Non-Infringing Alternatives" to Motorola Patents</i> by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	309	Declaration of Stephen A. Swedlow filed by Defendant Motorola Mobility, Inc. re: 307 Motion in Limine (Attachments: # 1 Exhibit 1 - Tdoc SMG2 GPRS 75/95, # 2 Exhibit 2 - ETSI SMG2/3/GPRS Tdoc 99/96) (Swedlow, Stephen) (Entered: 09/28/2012)
09/28/2012	310	Motion in Limine <i>No. 1 To Preclude Motorola From Offering Evidence Or Argument That It Was Entitled To Seek Injunctive Relief And/Or That It Did Not Breach Its FRAND Contracts By So Doing</i> (<u>Sealed Document</u>) by Plaintiff Apple Inc. (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	311	Motion in Limine <i>No. 2 To Exclude Evidence And Argument That Motorola's Patents Ruled Invalid Or Not Infringed Have Value</i> (<u>Sealed Document</u>) by Plaintiff Apple Inc. (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	312	Motion in Limine <i>No. 3 To Exclude Evidence And Argument That Apple Must Satisfy A Condition Precedent To Trigger Motorola's FRAND Obligation</i> (<u>Sealed Document</u>) by Plaintiff Apple Inc. (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	313	Motion in Limine <i>No. 4 To Preclude Motorola From Offering Evidence Or Argument That It Had A "Process" For Complying With IPR Disclosure Policies</i> (<u>Sealed Document</u>) by Plaintiff Apple Inc. (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	314	Motion in Limine <i>No. 5 To Preclude Motorola From Offering Evidence About Why It Purported To Suspend Its License With Chi Mei</i> (<u>Sealed Document</u>) by Plaintiff Apple Inc. (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	315	Motion in Limine <i>No. 6 To Preclude Motorola From Arguing That Its Cellular Standards-Essential Patent Rights Were Not Exhausted As To The First iPhone</i> (<u>Sealed Document</u>) by Plaintiff Apple Inc. (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	316	Motion in Limine <i>No. 7 To Preclude Evidence And Argument Regarding Opinions On Alternatives From Motorola's Technical Experts</i> (<u>Sealed Document</u>) by Plaintiff Apple Inc. (Ernst, Samuel) (Entered: 09/28/2012)

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09/28/2012	317	Motion in Limine <i>No. 8 To Exclude Improper Motorola Expert Testimony (Sealed Document)</i> by Plaintiff Apple Inc. (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	318	Motion in Limine - <i>Daubert Motion To Exclude Dr. Leonard From Opining On The Correct FRAND Royalty Rate For Motorola's Declared Standards-Essential Patents (Sealed Document)</i> by Plaintiff Apple Inc. (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	319	Motion in Limine - <i>Daubert Motion To Exclude Testimony Of Dr. Gregory Leonard Relating To Synergies (Sealed Document)</i> by Plaintiff Apple Inc. (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	320	Declaration of Samuel F. Ernst filed by Plaintiff Apple Inc. <i>In Support of Apple's Motions In Limine Nos. 1-8 and Daubert Motions re: 318 Motion in Limine, 312 Motion in Limine, 314 Motion in Limine, 313 Motion in Limine, 311 Motion in Limine, 310 Motion in Limine, 317 Motion in Limine, 315 Motion in Limine, 319 Motion in Limine, 316 Motion in Limine (Sealed Document)</i> (Attachments: # 1 Exhibit 1 - Motorola's Answer and Counterclaims in Case No. 3:10-cv-00661 (W.D. Wis. Nov. 9,, # 2 Exhibit 2 - Motorola's Answer and Counterclaims in Case No. 3:10-cv-00662 (W.D. Wis. Nov. 9, 2010), # 3 Exhibit 3 - Order of January 16, 2012 in the Illinois case, # 4 Exhibit 4 - Order of April 9, 2012, in the Illinois case, # 5 Exhibit 5 - Order of June 5, 2012, in the Illinois case, # 6 Exhibit 6 - Motorola's Supplemental Objections and Responses to Apple's Second Set of Interrogatories (Nos. 9, 12-16) (Sep. 6, 2012), # 7 Exhibit 7 - Cellular Essential Properties Cross License Agreement between Motorola and Chi Mei (Oct. 2003), # 8 Exhibit 8 - Motorola letter to Chi Mei (Aug. 31, 2007), # 9 Exhibit 9 - ND of IL - Declaration of Richard Lutton (Dec. 12, 2011), # 10 Exhibit 10 - Notice of Commission Decision Finding No Violation of Section 337 from ITC 745 Investigation") (Aug. 24, 2012), # 11 Exhibit 11 - Order of May 22, 2012, in the Illinois case, # 12 Exhibit 12 - spreadsheet produced by Motorola, and Bates Stamped as MOTO-APPLE-0007539444, # 13 Exhibit 13 - USA CRMOTO results and Bates Stamped as MOTO-APPLE-0007372450-0007372522, # 14 Exhibit 14 - Motorola's Answer and Counterclaims to Apple's Amended Complaint in Case No. 3:10-cv-00662 (W.D. Wis. Mar. 22, 2011), # 15 Exhibit 15 - Motorola's letter to Chi Mei (Oct. 5, 2007) (Warren Dep. Ex. 31), # 16 Exhibit 16 - Motorola's letter to Chi Mei (Oct. 26, 2007) (Warren Dep. Ex. 28) (Ernst, Samuel) Modified exhibit description on

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		10/1/2012. (mmo) (Entered: 09/28/2012)
09/28/2012	321	Motion in Limine - <i>Plaintiff Apple Inc.'s Request for Judicial Notice</i> (<u>Sealed Document</u>) by Plaintiff Apple Inc. (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	322	Declaration of Richard Anthony Lopez filed by Plaintiff Apple Inc. <i>In Support of Plaintiff Apple Inc.'s Request for Judicial Notice</i> re: 321 Motion in Limine (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - Order of January 16, 2012, in the Illinois case, # 2 Exhibit 2 - Order of April 9, 2012, in the Illinois case, # 3 Exhibit 3 - Order of June 5, 2012, in the Illinois case, # 4 Exhibit 4 - Opinion and Order of October 13, 2011 in the Illinois case, # 5 Exhibit 5 - Notice of Commission Decision Finding No Violation of Section 337 from ITC 745 Investigation, # 6 Exhibit 6 - Opinion and Order of June 22, 2012 in the Illinois case, # 7 Exhibit 7 - Motorola's Answer and Counterclaims in Case No. 2:08-CV-247 (E.D. Tex.), # 8 Exhibit 8 - Motorola's Responses to Apple's Proposed Findings of Fact, filed May 30, 2012, # 9 Exhibit 9 - Motorola's Answer and Counterclaims to Amended Complaint in the Illinois case, # 10 Exhibit 10 - Motorola's Corrected Verified Complaint in the ITC 745 Investigation, # 11 Exhibit 11 - Third Party US FTC Statement on the Public Interest attached to Injunctive Relief Opposition in the ITC 745 Investigation, # 12 Exhibit 12 - Business Software Alliance's Response on the Public Interest-Industry participant briefs in the ITC 745 Investigation, # 13 Exhibit 13 - Hewlett Packard Co.'s Response of Public Interest-Industry participant briefs in the ITC 745 Investigation, # 14 Exhibit 14 - Verizon's Statement of Public Interest-Industry participant briefs in the ITC 745 Investigation, # 15 Exhibit 15 - RILA's Statement of Public Interest-Industry participant briefs in the ITC 745 Investigation, # 16 Exhibit 16 - ACT's Statement of Public Interest-Industry participant briefs in the ITC 745 Investigation, # 17 Exhibit 17 - Nokia's Statement of Public Interest-Industry participant briefs in the ITC 745 Investigation, # 18 Exhibit 18 - Cisco's Statement of Public Interest-Industry participant briefs Opposition in the ITC 745 Investigation, # 19 Exhibit 19 - AT&T's Statement of Public Interest-Industry participant briefs in the ITC 745 Investigation) (Ernst, Samuel) (Entered: 09/28/2012)
09/28/2012	323	Exhibit to 322 Declaration, filed by Apple Inc. <i>Exhibits 20-45 to Lopez Declaration In Support of Plaintiff Apple Inc.'s Request for Judicial</i>

Notice (Sealed Document) (Attachments:

[1](#) Exhibit 20 - (Part 1) Apple's Amended Complaint in the Illinois case,
[2](#) Exhibit 20 - (Part 2) Apple's Amended Complaint in the Illinois case,
[3](#) Exhibit 20 - (Part 3) Apple's Amended Complaint in the Illinois case,
[4](#) Exhibit 21 - Apple's Answer to Corrected Verified Complaint in the ITC 745 Investigation,
[5](#) Exhibit 22 - Apple's Second Amended Complaint in Case. No. 3:12cv00355 (S.D. Cal. Aug. 3, 2012),
[6](#) Exhibit 23 - Motorola's Answer to Second Amended Complaint in the S.D. Cal. Case,
[7](#) Exhibit 24 - U.S. Patent No. 4,975,952,
[8](#) Exhibit 25 - U.S. Patent No. 6,175,559,
[9](#) Exhibit 26 - U.S. Patent No. 6,359,898,
[10](#) Exhibit 27 - U.S. Patent No. 6,359,898 patent provisional application,
[11](#) Exhibit 28 - U.S. Patent No. 5,490,230,
[12](#) Exhibit 29 - U.S. Patent No. 5,636,223,
[13](#) Exhibit 30 - U.S. Patent No. 5,319,712,
[14](#) Exhibit 31 - U.S. Patent No. 5,572,193,
[15](#) Exhibit 32 - U.S. Patent No. 6,246,697,
[16](#) Exhibit 33 - U.S. Patent No. 5,311,516,
[17](#) Exhibit 34 - LM Ericsson Telephone Co., Form 6-K (Jan. 25, 2012),
[18](#) Exhibit 35 - Motorola, Inc. Form 10-K, year ended December 31, 2008,
[19](#) Exhibit 36 - Motorola, Inc. Form 10-K, year ended December 31, 2009,
[20](#) Exhibit 37 - Nokia Corp., Form 6-K (Jan. 26, 2012),
[21](#) Exhibit 38 - Nokia Corp., Form 20-F (Dec. 31, 2010),
[22](#) Exhibit 39 - Nokia Corp., Form 6-K (May 2, 2011),
[23](#) Exhibit 40 - Telefonaktiebolaget LM Ericsson, Form 20-F, year ended December 31, 2007,
[24](#) Exhibit 41 - Telefonaktiebolaget LM Ericsson, Form 20-F, year ended December 31, 2008,
[25](#) Exhibit 42 - Telefonaktiebolaget LM Ericsson, Form 20-F, year ended December 31, 2009,
[26](#) Exhibit 43 - Telefonaktiebolaget LM Ericsson, Form 20-F, year ended December 31, 2010,
[27](#) Exhibit 44 - Federal Reserve Selected Interest Rates (Daily),
[28](#) Exhibit 45 - Federal Reserve Historical Rates for the Euro) (Ernst, Samuel) Modified docket text on 10/1/2012 (mmo). (Entered: 09/28/2012)

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	324	** TEXT ONLY ORDER ** ORDER granting 266 Motion to Admit Robert Joseph Williams Pro Hac Vice. Signed by Magistrate Judge Peter Oppeneer on 10/1/2012. (arw) (Entered: 10/01/2012)
10/03/2012	325	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 251 Motion for Sanctions filed by Apple Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/03/2012)
10/03/2012	326	Declaration of Amanda S. Williamson re 325 Brief in Opposition (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/03/2012)
10/05/2012	327	Deposition of Karl Reardon taken on May 27, 2011 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	328	Deposition of Daniel Borges taken on June 2, 2011 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	329	Deposition of Jerry Hausman taken on June 8, 2011 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	330	Deposition of Boris Teksler taken on July 7, 2011 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	331	Deposition of Tom Mavrakakis taken on July 19, 2011 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	332	Deposition of Boris Teksler taken on February 16, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	333	Deposition of Stan Ng taken on February 17, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	334	Deposition of Mark Buckley taken on February 22, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	335	Deposition of Boris Teksler taken on March 14, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	336	Deposition of Mark Buckley taken on March 16, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	337	Deposition of Tony Blevins taken on May 18, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	338	Deposition of Brian Classon taken on August 24, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	339	Deposition of Robert Love taken on August 28, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	340	Deposition of Kenneth Stewart taken on August 28, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)

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		<u>Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	341	Deposition of Jeff Williams taken on September 25, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	342	Deposition of David Tom taken on October 2, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/05/2012)
10/05/2012	343	Notice by Plaintiff Apple Inc. <i>Notice of Intent to Serve Trial Subpoenas</i> . (Fram, Robert) (Entered: 10/05/2012)
10/10/2012	344	Deposition of Colin Frank taken on Aug. 23, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/10/2012)
10/10/2012	345	Deposition of J. Stevenson Kenney taken on Sept. 7, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/10/2012)
10/12/2012	346	Motion to Admit Michael Rex McCray Pro Hac Vice. (Pro Hac Vice fee \$50, receipt number 0758-1065163) by Counter Claimant Motorola Mobility, Inc., Defendant Motorola Mobility, Inc. Motions referred to Magistrate Judge Peter Oppeneer. (McCray, Michael) (Entered: 10/12/2012)
10/12/2012	347	Expert Report of Kevin C. Almeroth (April 15, 2012) by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - C.V. of Kevin C. Almeroth, # 2 Exhibit 2 - Expert Report of Kevin C. Almeroth (September 15, 2011), # 3 Exhibit 3 - Rebuttal Expert Report of Kevin C. Almeroth (October 25, 2011), # 4 Exhibit 4 - Supplemental Expert Report of Kevin C. Almeroth (March 1, 2012), # 5 Exhibit 5 - Supplemental Rebuttal Expert Report of Kevin C. Almeroth (March 22, 2012) (Swedlow, Stephen) (Entered: 10/12/2012)
10/12/2012	348	Deposition of Kevin C. Almeroth taken on August 31, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/12/2012)
10/12/2012	349	Expert Report of Tim Williams (April 15, 2012) by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - C.V. of Tim Williams, # 2 Exhibit 2 - Expert Report of Tim Williams (September 15, 2011), # 3 Exhibit 3 - Rebuttal Expert Report of Tim Williams (October 25, 2011), # 4 Exhibit 4 - Supplemental Expert Report of Time Williams (March 1, 2012), # 5 Exhibit 5 - Supplemental Rebuttal Expert Report of Tim Williams (March 22, 2012) (Swedlow, Stephen) (Entered: 10/12/2012)

10/12/2012	350	Expert Report of Carla S. Mulhern (March 20, 2012) by Plaintiff Apple Inc. (Sealed Document) (Ernst, Samuel) (Entered: 10/12/2012)
10/12/2012	351	Disregard - refiled as entry 385 ; Modified on 10/15/2012; no signature, requested attorney refile. (mmo). (Entered: 10/12/2012)
10/12/2012	352	Expert Report of Louis P. Berneman (September 15, 2011) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit A - Curriculum Vitae for Louis Berneman, # 2 Exhibit B - Materials Considered, # 3 Exhibit C - Motorola Declarations Submitted to ETSI re GSM, # 4 Exhibit D - IEEE and ETSI 3GPP Policies) (Ernst, Samuel) (Entered: 10/12/2012)
10/12/2012	353	Supplemental Expert Report of Louis P. Berneman (March 1, 2012) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit A - Curriculum Vitae for Louis Berneman, # 2 Exhibit B - Additional Materials Considered, # 3 Exhibit C - License Agreement between CMCS and Motorola, # 4 Exhibit D - Expert Report of Dennis Carlton) (Ernst, Samuel) (Entered: 10/12/2012)
10/12/2012	354	Expert Report of Mark Lanning (March 6, 2012) by Plaintiff Apple Inc. (Sealed Document) (Ernst, Samuel) (Entered: 10/12/2012)
10/12/2012	355	Supplemental Expert Report of Brian W. Napper (March 1, 2012) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit 1 - C.V. for Brian Napper, # 2 Exhibit 2 - Testimony, # 3 Exhibit 3 - Publications, # 4 Exhibit 4 - Documents Reviewed and Considered, # 5 Exhibit 5 - Traditional Handset and Smartphone Revenue, # 6 Exhibit 6 - Motorola's Theoretical Maximum Payment for Rights, # 7 Exhibit 6.1 - Traditional Handset and Smartphone Revenue, # 8 Exhibit 6.2 - Traditional Handset and Smartphone Revenue, # 9 Exhibit 6.3 - Motorola Home and Networks Mobility Revenue, # 10 Exhibit 7 - Motorola's Theoretical Maximum Payment for Rights to Nokia, # 11 Exhibit 7.1 - Traditional Handset and Smartphone Revenue, # 12 Exhibit 7.2 - Traditional Handset and Smartphone Revenue, # 13 Exhibit 7.3 - Motorola Home and Networks Mobility Revenue, # 14 Exhibit 7A - Motorola's Theoretical Maximum Payment for Rights, # 15 Exhibit 7A.1 - Traditional Handset and Smartphone Revenue, # 16 Exhibit 7A.2 - Traditional Handset and Smartphone Revenue, # 17 Exhibit 7A.3 - Motorola Home and Networks Mobility Revenue, # 18 Exhibit 8 - Motorola's Theoretical Maximum Payment for Rights,

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		# 19 Exhibit 8.1 - Traditional Handset and Smartphone Revenue, # 20 Exhibit 8.2 - Traditional Handset and Smartphone Revenue, # 21 Exhibit 8.3 - Motorola Home and Network Mobility Revenue, # 22 Exhibit 8A - Motorola Theoretical Maximum Payment for Rights, # 23 Exhibit 8A.1 - Traditional Handset and Smartphone Revenue, # 24 Exhibit 8A.2 - Traditional Handset and Smartphone Revenue, # 25 Exhibit 8A.3 - Motorola Home and Networks Mobility Revenue) (Ernst, Samuel) (Entered: 10/12/2012)
10/12/2012	356	Deposition of Kirk Dailey taken on May 11, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/12/2012)
10/12/2012	357	Expert Report of Dr. Kevin C. Almeroth Regarding U.S. Patent No. 5,636,223 (April 15, 2012) by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - C.V. of Kevin C. Almeroth, # 2 Exhibit 2 - Expert Report of Kevin C. Almeroth (May 6, 2011), # 3 Exhibit 3 - Rebuttal Expert Report of Kevin C. Almeroth (May 23, 2011), # 4 Exhibit 4 - Corrected Direct Witness Statement of Kevin C. Almeroth (November 18, 2011), # 5 Exhibit 5 - Rebuttal Witness Statement of Kevin C. Almeroth (November 30, 2011), # 6 Exhibit 6 - Deposition of David Andrus (May 6, 2011), # 7 Exhibit 7 - Deposition of Karl Reardon (May 27, 2011), # 8 Exhibit 8 - 337-TA-745 Hearing Transcript (December 8, 2011)) (Swedlow, Stephen) Modified exhibit description on 10/15/2012; depos. previously filed. (mmo). (Entered: 10/12/2012)
10/12/2012	358	Expert Report of J. Stevenson Kenney, Ph.D Regarding U.S. Patent No. 6,175,559 by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - C.V. of J. Stevenson Kenney, # 2 Exhibit 2 - Expert Report of J. Stevenson Kenney (September 15, 2011), # 3 Exhibit 3 - Rebuttal Expert Report of J. Stevenson Kenney (October 25, 2011), # 4 Exhibit 4 - Supplemental Expert Report of J. Stevenson Kenney (March 1, 2012), # 5 Exhibit 5 - Supplemental Rebuttal Expert Report of J. Stevenson Kenney (March 22, 2012)) (Swedlow, Stephen) (Entered: 10/12/2012)
10/12/2012	359	Expert Report of Dr. J. Stevenson Kenney Regarding U.S. Patent No. 6,246,697 by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - C.V. of J. Stevenson Kenney, # 2 Exhibit 2 - Expert Report of J. Stevenson Kenney (May 7, 2011),

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		<p># 3 Exhibit 3 - Rebuttal Expert Report of J. Stevenson Kenney (May 23, 2011),</p> <p># 4 Exhibit 4 - Rebuttal Expert Report of J. Stevenson Kenney (July 21, 2011),</p> <p># 5 Exhibit 5 - Corrected Direct Witness Statement of Dr. J. Stevenson Kenney (November 18, 2011),</p> <p># 6 Exhibit 6 - Corrected Rebuttal Witness Statement of Dr. J. Stevenson Kenney (November 30, 2011)) (Swedlow, Stephen) (Entered: 10/12/2012)</p>
10/12/2012	360	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 321 Motion in Limine filed by Apple Inc. (Swedlow, Stephen) (Entered: 10/12/2012)
10/12/2012	361	<p>Declaration of David Elihu re 360 Brief in Opposition of Apple Inc's Request for Judicial Notice (Attachments:</p> <p># 1 Exhibit A- 337-TA-745 Initial Determination,</p> <p># 2 Exhibit B-337-TA-794 Initial Determination (Part One),</p> <p># 3 Exhibit B-337-TA-794 Initial Determination (Part Two),</p> <p># 4 Exhibit C-Correspondence from Ericsson, Inc.,</p> <p># 5 Exhibit D-Correspondence from Interdigital Communications, LLC,</p> <p># 6 Exhibit E-Submission of the Office of Unfair Import Investigations on Remedy and the Public Interest,</p> <p># 7 Exhibit F-Qualcomm Incorporated in Response to the Commission's Request for Written Submissions,</p> <p># 8 Exhibit G-Correspondence from Research in Motion Corporation,</p> <p># 9 Exhibit H-Statement from Samsung,</p> <p># 10 Exhibit I-Correspondence from The Innovation Alliance)</p> <p>(Swedlow, Stephen) (Entered: 10/12/2012)</p>
10/12/2012	362	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 316 Motion in Limine filed by Apple Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/12/2012)
10/12/2012	363	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 318 Motion in Limine filed by Apple Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/12/2012)
10/12/2012	364	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 319 Motion in Limine filed by Apple Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/12/2012)
10/12/2012	365	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 317 Motion in Limine filed by Apple Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/12/2012)
10/12/2012	366	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 310 Motion in Limine, filed by Apple Inc. (<u>Sealed Document</u>) (Swedlow,

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		Stephen) (Entered: 10/12/2012)
10/12/2012	367	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 311 Motion in Limine filed by Apple Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/12/2012)
10/12/2012	368	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 312 Motion in Limine filed by Apple Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/12/2012)
10/12/2012	369	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 313 Motion in Limine filed by Apple Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/12/2012)
10/12/2012	370	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 314 Motion in Limine filed by Apple Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/12/2012)
10/12/2012	371	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 315 Motion in Limine filed by Apple Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/12/2012)
10/12/2012	372	Brief in Opposition by Plaintiff Apple Inc. re: 292 Motion in Limine filed by Motorola Mobility, Inc. <i>Apple's Opposition to Motorola's Motion in Limine to Exclude Evidence and Argument Concerning Prior Litigation Judicial Decisions Regarding the Patents-in-Suit</i> (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/12/2012)
10/12/2012	373	Brief in Opposition by Plaintiff Apple Inc. re: 286 Motion in Limine filed by Motorola Mobility, Inc. <i>Apple's Opposition to Motorola's Motion in Limine to Determine the Terms of ETSI and IEEE Policies</i> (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/12/2012)
10/12/2012	374	Brief in Opposition by Plaintiff Apple Inc. re: 289 Motion in Limine filed by Motorola Mobility, Inc. <i>Apple's Opposition to Motorola's Motion in Limine Under FRE 408 to Preclude Evidence and Argument in Support of Apple's FRAND Breach and Estoppel Claims after January 4, 2011</i> (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/12/2012)
10/12/2012	375	Brief in Opposition by Plaintiff Apple Inc. re: 298 Motion in Limine filed by Motorola Mobility, Inc. <i>Apple's Opposition to Motorola's Motion in Limine to Exclude Evidence and References to Irrelevant Standards and Standard Setting Bodies</i> (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/12/2012)
10/12/2012	376	Brief in Opposition by Plaintiff Apple Inc. re: 295 Motion in Limine filed by Motorola Mobility, Inc. <i>Apple's Brief in Opposition to Motorola's Motion in Limine to Preclude Evidence and Argument</i>

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		<i>Relating to Non-Parties (1) CMCS, and (2) Qualcomm (Sealed Document)</i> (Ernst, Samuel) (Entered: 10/12/2012)
10/12/2012	377	Brief in Opposition by Plaintiff Apple Inc. re: 280 Motion in Limine filed by Motorola Mobility, Inc. <i>Apple's Brief in Opposition to Motorola's Motion in Limine to Preclude Apple from Seeking Specific Performance (Sealed Document)</i> (Ernst, Samuel) (Entered: 10/12/2012)
10/12/2012	378	Brief in Opposition by Plaintiff Apple Inc. re: 283 Motion in Limine filed by Motorola Mobility, Inc. <i>Apple's Opposition to Motorola's Motion in Limine to Preclude Evidence and Argument Relating to Timeliness to Patient Disclosures to ETSI (Sealed Document)</i> (Ernst, Samuel) (Entered: 10/12/2012)
10/12/2012	379	Brief in Opposition by Plaintiff Apple Inc. re: 307 Motion in Limine filed by Motorola Mobility, Inc. <i>Apple's Opposition to Motorola's Motion in Limine to Exclude Evidence or Argument Related to Allegedly "Non-Infringing Alternatives" to Motorola U.S. Patent Nos. 5,311,516, 6,175,559, and 6,359,898 (Sealed Document)</i> (Ernst, Samuel) (Entered: 10/12/2012)
10/12/2012	380	Brief in Opposition by Plaintiff Apple Inc. re: 301 Motion in Limine filed by Motorola Mobility, Inc. <i>Apple's Opposition to Motorola Mobility, Inc.'s Motion to Preclude the Testimony and Opinions of Dr. Louis Berneman Relating to FRAND on Rule 702 and Daubert Grounds (Sealed Document)</i> (Ernst, Samuel) (Entered: 10/12/2012)
10/12/2012	381	Brief in Opposition by Plaintiff Apple Inc. re: 304 Motion in Limine filed by Motorola Mobility, Inc. <i>Apple's Opposition to Motorola's Motion to Preclude the Testimony and Opinions of Dr. Dennis Carlton Relating to FRAND and Market Power on Rule 702 and Daubert Grounds (Sealed Document)</i> (Ernst, Samuel) (Entered: 10/12/2012)
10/12/2012	382	Declaration of Samuel F. Ernst filed by Plaintiff Apple Inc. <i>in Support of Apple's Opposition to Motorola's Motions in Limine and Daubert Motions</i> re: 301 Motion in Limine, 307 Motion in Limine, 289 Motion in Limine, 286 Motion in Limine, 283 Motion in Limine, 298 Motion in Limine, 304 Motion in Limine, 280 Motion in Limine, 292 Motion in Limine, 295 Motion in Limine (<i>Sealed Document</i>) (Attachments: # 1 Exhibit 17 - GPD Standards Strategy Version 0.2 08/09/98, # 2 Exhibit 18 - Platform Planning and Systems Architecture, Business Update Meeting (Dec. 19, 2007), # 3 Exhibit 19 - PCS Research and Advanced Technology Labs 1999 Second Half Review (Jan. 15, 2000), # 4 Exhibit 20 - 3GPP E-UTRA Long Term Evolution (LTE) (Oct. 20, 2006), # 5 Exhibit 21 - Agenda Overview (MOT_ITC2586191-2586208), # 6 Exhibit 22 - OMA PoC and PAG Standard (May 31, 2006))

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(MOT_ITC2205834-2205866),
[7](#) Exhibit 23 - NDIL, Motorola's Brief Pursuant to the Court's June 13, 2012 Order, in Illinois Case (June 18, 2012),
[8](#) Exhibit 24 - November 1999 submission to ETSI (WI-178-011302-11304),
[9](#) Exhibit 25 - IPR Information and Declaration Statement (WI-178-026111-2611),
[10](#) Exhibit 26 - Letter to From R. Sonnentag to R. Pocknell (Apr. 20, 2005),
[11](#) Exhibit 27 - Letter from K. Dailey to D. Aberle (Jan. 11, 2011),
[12](#) Exhibit 28 - Letter from K. Dailey to J. Huang (Aug. 31, 2007),
[13](#) Exhibit 29 - Certified translation of Samsung Electronics Co. v. S.A.R.I. Apple, RG No. 11/58301, Tribunal de grand instance [TGI] [Court of First Instance] Paris, Dec. 8, 2011 (Fr.),
[14](#) Exhibit 30 - Letter from R. Sonnentag to B. Booth (June 21, 2005),

[15](#) Exhibit 31 - Palm, Inc. Development and Supply Line Agreement (June 2003),
[16](#) Exhibit 32 - Chi Mei Commercial Invoice (Jan. 15, 2004),
[17](#) Exhibit 33 - Revised Direct Witness Statement of Kirk Dailey, in 745 Investigation (Dec. 7, 2011),
[18](#) Exhibit 34 - NDIL, Motorola's Opposition to Apple's Motion in Limine No. 11 to Preclude Motorola, in Illinois case (May 21, 2012),
[19](#) Exhibit 35 - Judgment in a Civil Action, in the Illinois case (June 22, 2012),
[20](#) Exhibit 36 - Pretrial Conference Hearing Transcript, in the Illinois case (June 7, 2012),
[21](#) Exhibit 37 - NDIL, Declaration of Justin Huang, in the Illinois case (March 1, 2012),
[22](#) Exhibit 38 - Cellular Essential Properties Cross License Agreement (Oct. 1, 2003) (MOTO-APPLE-0003986319-86),
[23](#) Exhibit 39 - purchase order from Chi Mei Communication Systems to Apple (June 22, 2007) (WI-178-006789),
[24](#) Exhibit 40 - purchase order from Chi Mei Communication Systems to Apple (June 29, 2007) (WI-178-010707),
[25](#) Exhibit 41 - Motorola's letter to Chi Mei Communication Systems (August 4, 2007) (MOTO-APPLE-0004351575_01141),
[26](#) Exhibit 42 - Motorola's letter to Apple (August 6, 2007) (WI-178-003651-67),
[27](#) Exhibit 43 - Apple's letter to Motorola (March 5, 2008) (WI-178-002651-52),
[28](#) Exhibit 44 - E-mail exchange between Apple and Motorola (Apr. 21, 2010) (WI-178-002028-31),
[29](#) Exhibit 45 - Verified Complaint Under Section 337 of the Tariff Act of 1930, in 745Investigation (October 6, 2010),

		<p># 30 Exhibit 46 - Patent License Agreement between Motorola and Qualcomm (Sept. 26, 1990) (MOTO-APPLE-0004351575_01124-37),</p> <p># 31 Exhibit 47 - Agreement to Amend the Patent License Agreement between Motorola and Qualcomm (MOTO-APPLE-0004104703-20),</p> <p># 32 Exhibit 48 - Qualcomm's letter to Motorola (Mar. 7, 2007) (MOTO-APPLE-0004104762-74),</p> <p># 33 Exhibit 49 - PCS-IP Licensing (MOT_ITC1260687-743),</p> <p># 34 Exhibit 50 - PCS IP & Global Standards World Class Leadership (Oct. 9, 2003) (MOT_ITC1057510-35),</p> <p># 35 Exhibit 51 - OMA Device Management (MOTO-APPLE-0003333564-73),</p> <p># 36 Exhibit 52 - Standards, IP Network Systems Standards Report (Jan. 19, 2006) (MOTO-APPLE-0003310707-58),</p> <p># 37 Exhibit 53 - Motorola Mobility MMI - Samsung Meeting (Mar. 23, 2011) (MOTO-APPLE-005218084_00770-84),</p> <p># 38 Exhibit 54 - Motorola Mobility - HTC Meeting, IP License Discussions (Feb. 2, 2011) (MOTO-APPLE-0005218084_00762-69),</p> <p># 39 Exhibit 55 - Motorola Licensing Presentation to Apple (Sept. 27, 2007) (WI-178-001697-99) (Ernst, Samuel) Modified exhibit descriptions on 10/15/2012. (mmo) (Entered: 10/12/2012)</p>
10/15/2012	383	<p>Notice of Withdrawal of Motion by Plaintiff Apple Inc. re 251 Motion for Sanctions (<u>Sealed Document</u>) filed by Apple Inc. <i>Apple Inc.'s Notice of Withdrawal of Its Motion for Discovery Sanctions.</i> (Shafroth, Nathan) (Entered: 10/15/2012)</p>
10/16/2012	384	<p>** TEXT ONLY ORDER **</p> <p>ORDER granting 346 Motion to Admit Michael Rex McCray Pro Hac Vice. Signed by Magistrate Judge Peter Oppeneer on 10/16/2012. (arw) (Entered: 10/16/2012)</p>
10/16/2012	385	<p>Expert Report of David E. Culler by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/16/2012)</p>
10/22/2012		<p>Set Deadlines and Hearings: Final Pretrial Conference set for 11/1/2012 at 3:00 PM before District Judge Barbara B. Crabb. (arw) (Entered: 10/22/2012)</p>
10/23/2012	386	<p>Motion for Guidance on Trial Schedule by Defendant Motorola Mobility, Inc. Response due 10/30/2012. (Swedlow, Stephen) (Entered: 10/23/2012)</p>
10/23/2012	387	<p>Deposition of Tyler Brown taken on April 11, 2012, Vol. 3, (<u>Sealed Document</u>) (Swedlow, Stephen) Modified on 10/24/2012; corrected date of depo., added vol. number 3. (mmo). (Entered: 10/23/2012)</p>
10/23/2012	388	<p>Deposition of Kevin Laird taken on June 7, 2011 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/23/2012)</p>

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10/23/2012	389	Deposition of David Willard taken on August 25, 2011 (Sealed Document) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	390	Deposition of Meng Zhu taken on April 13, 2012 (Sealed Document) (Attachments: # 1 Errata) (Swedlow, Stephen) Modified on 10/24/2012; corrected first name and date of deposition. (mmo). (Entered: 10/23/2012)
10/23/2012	391	Deposition of Timothy Kowalski taken on September 27, 2012 (Sealed Document) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	392	Deposition of Kevin Almeroth taken on June 3, 2011 (Sealed Document) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	393	Deposition of J. Stevenson Kenney taken on April 27, 2012 (Sealed Document) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	394	Deposition of J. Stevenson Kenney taken on May 31, 2011 (Sealed Document) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	395	Deposition of Gregory Leonard taken on July 5, 2011 (Sealed Document) (Swedlow, Stephen) Modified on 10/24/2012; corrected date. (mmo). (Entered: 10/23/2012)
10/23/2012	396	Deposition of Louis Berneman taken on May 8, 2012 (Sealed Document) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	397	Deposition of Leonard Cimini taken on July 13, 2011 (Sealed Document) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	398	Deposition of Chris Heegard taken on May 4, 2012 (Sealed Document) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	399	Deposition of Brian Napper taken on April 29, 2012 (Sealed Document) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	400	Deposition of Brian Napper taken on May 22, 2012 (Sealed Document) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	401	Deposition of Brian Napper taken on September 19, 2012 (Sealed Document) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	402	Deposition of Timothy Simcoe taken on April 30, 2012 (Sealed Document) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	403	Deposition of Mark Lanning taken on June 1, 2011 (Sealed Document) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	404	Deposition of Mark Lanning taken on June 2, 2011 (Sealed Document) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	405	Deposition of Stephan Schell taken on April 13, 2011 (Sealed

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		<u>Document</u>) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	406	Deposition of Helene Workman taken on September 19, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	407	Deposition of Colin Frank taken on May 26, 2011 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	408	Disregard - refiled as entry 418 ; Modified on 10/24/2012; requested attorney refile in condensed format (mmo). (Entered: 10/23/2012)
10/23/2012	409	Deposition of Kenneth McNeill Taylor, Jr., taken on April 27, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) Modified on 10/24/2012; corrected name. (mmo). (Entered: 10/23/2012)
10/23/2012	410	Deposition of Taraneh Maghame taken on October 12, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	411	Deposition of Patrick Murphy taken on October 12, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	412	Deposition of Jonathan Meyer taken on June 15, 2011 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	413	Deposition of Charlotte Whitaker taken on June 13, 2011 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	414	Deposition of Robert O'Hara taken on May 25, 2011 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	415	Deposition of Richard Sonnentag taken on May 11, 2011 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	416	Deposition of Anne Layne-Farrar taken on May 17, 2012 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/23/2012)
10/23/2012	417	Motion to Strike <i>REPORTS OF UNDISCLOSED "EXPERTS" DAVID E. CULLER AND STEVEN W. MCLAUGHLIN</i> (<u>Sealed Document</u>) by Defendant Motorola Mobility, Inc. Response due 10/30/2012. (Swedlow, Stephen) (Entered: 10/23/2012)
10/24/2012		Reset Briefing Deadlines re: 386 Motion for Guidance on Trial Schedule by Defendant Motorola Mobility, Inc. Brief in Opposition due 10/26/2012 by 12:00 PM CST. (arw/bbc) (Entered: 10/24/2012)
10/24/2012	418	Corrected Deposition of Dwight Smith taken on April 13, 2011 (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/24/2012)
10/26/2012	419	Brief in Opposition by Plaintiff Apple Inc. re: 386 Motion for Miscellaneous Relief filed by Motorola Mobility, Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/26/2012)

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10/26/2012	420	<p>Declaration of Samuel F. Ernst filed by Plaintiff Apple Inc. <i>In Support of Apple's Opposition to Motorola Mobility, Inc.'s Motion for Guidance on the Trial Schedule</i> re: 386 Motion for Miscellaneous Relief (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - Cellular Essential Properties Cross License Agreement, dated October 24, 2003 and Bates Stamped as MOTO-APPLE 0003986319-86, # 2 Exhibit 2 - Blanket Purchase Order, dated June 22, 2007 and Bates Stamped WI-178 006789, # 3 Exhibit 3 - Blanket Purchase Order, dated June 29, 2007 and Bates Stamped WI-178 010707, # 4 Exhibit 4 - letter to Mr. Huang from Mr. Dailey, dated August 4, 2007 and Bates Stamped MOTO-APPLE 0004351575_001141, # 5 Exhibit 5 - letter to Mr. Rosenberg from Mr. Whitaker, dated August 6, 2007 and Bates Stamped WI-178 003651-52, # 6 Exhibit 6 - letter to Mr. Sonnentag from Mr. Mavrakakis, dated March 5, 2008 and Bates Stamped WI-178 002651-52, # 7 Exhibit 7 - e-mail chain between Mr. Dailey and Mr. Teksler, dated April 20-21, 2010 and Bates Stamped WI-178 002028-31, # 8 Exhibit 8 - e-mail chain between Mr. Mavrakakis and Mr. Sonnetag, dated October 19, 2007 and Bates Stamped WI-178 002554-55, # 9 Exhibit 9 - e-mail from Mr. Mavrakakis to Mr. Sonnentag, dated October 31, 2007 and Bates Stamped WI-178 006514, # 10 Exhibit 10 - e-mail from Mr. Sonnentag to Mr. Mavrakakis attaching Motorola response letter dated November 12, 2007 and Bates Stamped WI-178 002618-20, # 11 Exhibit 11 - e-mail from Mr. Mavrakakis to Mr. Sonnentag, dated December 11, 2007 and Bates Stamped WI-178 002647, # 12 Exhibit 12 - Motorola document titled Feature Requirements and Architecture Specification, dated May 28, 2003 and Bates Stamped MOTO-APPLE 0000753910-754061, # 13 Exhibit 13 - Apple document Bates Stamped WI-178 004236, # 14 Exhibit 14 - Order from Microsoft v. Motorola, Case No. C10-1823JLR (W.D. Wash.), dated October 22, 2012, Docket No. 490, # 15 Exhibit 15 - ETSI Rules of Procedure, dated November 18, 1997 and Bates Stamped 745 Apple 7256417-421, # 16 Exhibit 16 - Order from Microsoft v. Motorola, Case No. C10-1823JLR (W.D. Wash.), dated October 10, 2012, Docket No. 465, # 17 Exhibit 17 - Pretrial Order from Microsoft v. Motorola, Case No. C10-1823JLR (W.D. Wash.), dated October 24, 2012, Docket 493) (Ernst, Samuel) (Entered: 10/26/2012)</p>
10/26/2012	421	<p>Notice by Plaintiff Apple Inc. re 419 Brief in Opposition <i>Notice of Corrected Citations</i>. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/26/2012)</p>

10/26/2012	422	Supplemental Declaration of Samuel F. Ernst filed by Plaintiff Apple Inc. <i>In Support of Apple's Opposition to Motorola Mobility, Inc.'s Motion for Guidance on the Trial Schedule</i> re: 386 Motion for Miscellaneous Relief (Sealed Document) (Attachments: # 1 Exhibit 18 - Amendment to Order of October 11, 2012, Microsoft v. Motorola, No. C10-1823JLR (W.D. Wash.) (Dkt. No. 469)) (Ernst, Samuel) (Entered: 10/26/2012)
10/26/2012	423	** TEXT ONLY ORDER ** Motorola has filed a request for guidance, directed to the scheduling of the trial set to begin on November 5, 2012 (dkt. 386 .) At present, the trial is expected to run for two weeks. The court will make every effort to keep the trial to one week but can make no promises that it will not last longer. Motorola will have to work within this schedule and plan its witnesses' testimony accordingly. Signed by District Judge Barbara B. Crabb on 10/26/12. (krj) (Entered: 10/26/2012)
10/29/2012	424	ORDER denying 310 Motion in Limine No. 1; granting in part and denying in part 311 Motion in Limine No. 2; granting 312 Motion in Limine No. 3; granting in part and denying in part 313 Motion in Limine No. 4; granting in part and denying in part 314 Motion in Limine No. 5; denying 315 Motion in Limine No. 6; denying 316 Motion in Limine No. 7; denying 317 Motion in Limine No. 8; granting in part and denying in part 318 Motion in Limine to Exclude Dr. Leonard from Opining on the Correct FRAND Royalty Rate; denying 319 Motion in Limine to Exclude Testimony of Dr. Gregory Leonard Relating to Synergies; granting 321 Motion in Limine <i>Request for Judicial Notice</i> ; denying 226 Motion for Leave to Rely Upon Supplemental Expert Reports; denying 280 Motion in Limine to Preclude Apple From Seeking Specific Performance; denying 283 Motion in Limine to Preclude Evidence and Argument Relating to Timeliness of Patent Disclosures to ETSI; denying 286 Motion in Limine to Determine the Terms of ETSI and IEEE Policies; granting in part and denying in part 289 Motion in Limine to Preclude Evidence and Argument in Support of Apple's Frand Breach and Estoppel Claims; denying 292 Motion in Limine to Exclude Evidence and Argument Concerning Prior Litigation Judicial Decisions; denying 295 Motion in Limine to Preclude Evidence and Argument Relating to Non-Parties CMCS and Qualcomm; granting in part and denying in part 298 Motion in Limine to Exclude Evidence and References to Irrelevant Standards and Standard Setting Bodies; denying 301 Motion in Limine to Preclude Testimony and Opinions of Mr. Louis Berneman; denying 304 Motion in Limine to Preclude Testimony and Opinions of Dr. Dennis Carlton; denying 307 Motion in Limine to Exclude Evidence or Argument Related to Allegedly Non-Infringing Alternatives; granting 218 Motion to Strike Expert Report of Dr. Leonard Cimini; granting 229 Motion to

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		Strike Supplemental Expert Report of Brian Napper. Signed by District Judge Barbara B. Crabb on 10/29/2012. (arw) (Entered: 10/29/2012)
10/29/2012	425	Deposition of Brian Blasius taken on June 3, 2011 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/29/2012)
10/29/2012	426	Deposition of Boris Teksler taken on December 9, 2010 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/29/2012)
10/29/2012	427	Deposition of Mark Buckley taken on February 22, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/29/2012)
10/29/2012	428	Deposition of Mark Buckley taken on July 8, 2011 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/29/2012)
10/29/2012	429	Deposition of Kirk Dailey taken on April 12, 2011 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/29/2012)
10/29/2012	430	Deposition of Richard Holleman taken on April 11, 2011 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/29/2012)
10/29/2012	431	Deposition of Carla Mulhern taken on April 27, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/29/2012)
10/29/2012	432	Deposition of Yong Hui Tong taken on August 28, 2012 (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/29/2012)
10/29/2012	433	Deposition of Brian Blasius taken on November 18, 2011 <i>Direct Witness Statement</i> (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/29/2012)
10/29/2012	434	Witness List <i>Parties' Witness List</i> by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/29/2012)
10/29/2012	435	Exhibit List <i>Parties' Exhibit List</i> by Plaintiff Apple Inc.. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/29/2012)
10/29/2012	436	Deposition Designations <i>Parties' Deposition Designations</i> by Plaintiff Apple Inc.. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/29/2012)
10/29/2012	437	Proposed Special Verdict - Liability and Damages <i>Apple Inc.'s Proposed Special Verdict</i> by Plaintiff Apple Inc. (Ernst, Samuel) (Entered: 10/29/2012)
10/29/2012	438	Proposed Special Verdict - Liability and Damages by Defendant Motorola Mobility, Inc. (McCray, Michael) (Entered: 10/29/2012)
10/29/2012	439	Proposed Findings of Fact by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/29/2012)
10/29/2012	440	Proposed Conclusions of Law by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/29/2012)

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10/29/2012	441	Proposed Findings of Fact by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/29/2012)
10/29/2012	442	Proposed Conclusions of Law by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/29/2012)
10/29/2012	443	Joint Final Pretrial Conference Report <i>Parties' Pretrial Statement</i> by Plaintiff Apple Inc. (Attachments: # 1 Exhibit A - Stipulated Facts and Issues of Law (<u>Sealed Document</u>), # 2 Exhibit B - Stipulation Regarding Expert Qualifications (<u>Sealed Document</u>) (Ernst, Samuel) Exhibits A and B sealed on 10/30/2012. (arw) (Entered: 10/30/2012)
10/30/2012		Action Requested: Counsel are requested to provide by the close of business on October 29, 2012 courtesy copies of proposed findings of fact and conclusions of law, witness lists, exhibit lists and proposed verdict forms. If they have not done so already, counsel may bring courtesy copies of deposition transcripts to the Final Pretrial Conference on November 1, 2012. (arw/sp) (Entered: 10/30/2012)
10/30/2012	444	Motion for Clarification re: 424 Order on Motion in Limine, Order on Motion to Strike, Order on Motion for Miscellaneous Relief by Defendant Motorola Mobility, Inc. Response due 10/31/2012 by noon. (Swedlow, Stephen) Modified on 10/30/2012. (arw) Modified briefing schedule per chambers on 10/30/2012 (krj). (Entered: 10/30/2012)
10/30/2012		Set/Reset Briefing Deadlines as to 444 Motion for Clarification re: 424 Order on Motion in Limine, Order on Motion to Strike, Order on Motion for Miscellaneous Relief. Brief in Opposition due 10/31/2012 by noon. (sp/krj) (Entered: 10/30/2012)
10/30/2012	445	Brief in Opposition by Plaintiff Apple Inc. re: 417 Motion to Strike filed by Motorola Mobility, Inc. (<u>Sealed Document</u>) (Lopez, Richard) (Entered: 10/30/2012)
10/30/2012	446	Declaration of Richard Anthony Lopez filed by Plaintiff Apple Inc. <i>In Support of Apple's Opposition to Motorola's Motion to Strike Reports of Undisclosed "Experts" David E. Culler and Steve W. McLaughlin</i> re: 417 Motion to Strike (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - E-mail chain between Jason Raofield and Stephen Swedlow) (Lopez, Richard) (Entered: 10/30/2012)
10/31/2012	447	Expert Report of Louis P. Berneman (March 6, 2012) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit A - CV, # 2 Exhibit Appendix A - Expert Report of Louis P. Berneman (Sept. 15, 2011), # 3 Exhibit Appendix B - Supplemental Expert Report of Louis P. Berneman (March 1, 2012) (Ernst, Samuel) Modified exhibit description

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		on 10/31/2012. (mmo) (Entered: 10/31/2012)
10/31/2012	448	Brief in Opposition by Plaintiff Apple Inc. re: 444 Motion for Miscellaneous Relief filed by Motorola Mobility, Inc. <i>Apple's Opposition to Motorola's Motion for Clarification</i> . (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	449	Expert Report of Brian W. Napper (September 14, 2011) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit A - CV, # 2 Exhibit B - Previous Testimony, # 3 Exhibit C - Publications, # 4 Exhibit D - Materials Reviewed and Considered, # 5 Exhibit E - Select your iPhone) (Ernst, Samuel) Modified exhibit description on 10/31/2012 (mmo). (Entered: 10/31/2012)
10/31/2012	450	Expert Report of Gregory K. Leonard (October 25, 2011) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	451	Expert Report of Gregory K. Leonard (May 23, 2011) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit A - CV, # 2 Exhibit B - Documents Reviewed and/or Relied Upon) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	452	Expert Report of J. Stevenson Kenney (April 20, 2011) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - Excerpt from "Principles of Communications Systems") (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	453	Expert Report of Jerry A. Hausman (May 6, 2011) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	454	Expert Report of Mark Lanning (May 6, 2011) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	455	Supplemental Expert Report of Timothy Simcoe (March 1, 2012) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	456	Expert Report of Timothy S. Simcoe (March 6, 2012) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit 1 - Appendix A - Expert Report of Timothy Simcoe (9/14/11), # 2 Exhibit 2 - Appendix B - Expert Report of Timothy Simcoe (3/1/2012), # 3 Exhibit A - CV, # 4 Exhibit B - Materials Reviewed, # 5 Exhibit C - ETSI Rules of Procedure,

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		# 6 Exhibit D - Essential Patent Family Counts by License, # 7 Exhibit E - Classification of ETSI Project Codes into 2G, 3G, and 4G Standards, # 8 Exhibit F - Essential Patent Families by Company and Standard INPADOC Families) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	457	Expert Report of Timothy S. Simcoe (September 14, 2011) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit A - CV, # 2 Exhibit B - Materials Reviewed, # 3 Exhibit C - ETSI Rules of Procedure, # 4 Exhibit D - Essential Patent Family Counts by License, # 5 Exhibit E - Classification of ETSI Project Codes into 2G, 3G, and 4G Standards, # 6 Exhibit F - Essential Patent Families by Company and Standard - INPADOC Families) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	458	Expert Report of Richard J. Holleman (May 23, 2011) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit A - CV, # 2 Exhibit B - Materials and Documents Reviewed) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	459	Expert Report of Leonard J. Cimini (September 15, 2011) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit A - CV, # 2 Exhibit B - Items Considered in Forming Expert Opinion, # 3 Exhibit C - Reasons for Allowance, # 4 Exhibit D - Excerpts from the Deposition Transcript of Jeffrey Smolinske) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	460	Supplemental Expert Report of Dr. Chris Heegard (April 20, 2012) by Plaintiff Apple Inc. (Sealed Document) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	461	Expert Report of Brian W. Napper (April 20, 2012) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit 1 - Documents Reviewed and Considered, # 2 Exhibit 2 - Motorola Cliq Features and Functions Usage, # 3 Exhibit 3 - Summary of Motorola Accused Products, # 4 Exhibit 4.1 - Motorola Accused Products - Units Sold (Quarterly), # 5 Exhibit 4.2 - Motorola Accused Products - Units Sold (Annual), # 6 Exhibit 5.1 - Motorola Accused Products - Revenue, Cost of Revenue and Gross Margin (Quarterly), # 7 Exhibit 5.2 - Motorola Accused Products - Revenue, Cost of Revenue and Gross Margin (Annual), # 8 Exhibit 6.1 - Summary Damages,

		# 9 Exhibit 6.2 - Royalty Calculation for the '949 Patent, # 10 Exhibit 6.3 - Royalty Calculation for the '647 Patent, # 11 Exhibit 6.4 - Royalty Calculation for the '263 Patent, # 12 Exhibit 6.4.2 - Royalty Calculation for the '263 Patent, # 13 Exhibit 6.5 - Royalty Calculation for the '002 Patent) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	462	Expert Report of Louis P. Berneman (April 15, 2012) by Plaintiff Apple Inc. (Sealed Document) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	463	Expert Report of Dennis Carlton (April 15, 2012) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit 1 - Materials Relied Upon) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	464	Expert Report of Tim Williams (September 15, 2011) by Plaintiff Apple Inc. (Sealed Document) (Ernst, Samuel) Modified on 11/1/2012; requested attorney refile with exhibits attached separately and described. (mmo). Removed disregard on 11/1/2012 (rep). (Entered: 10/31/2012)
10/31/2012	465	Trial Brief by Plaintiff Apple Inc. (Sealed Document) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	466	Declaration of Samuel F. Ernst in Support of 465 Apple's Trial Brief (Opposing Counsel CC'd and Exhibits Filed with the Clerk's Office on CD-Rom) by Plaintiff Apple Inc. (Sealed Document) (Ernst, Samuel) Modified docket text/docket relationship on 11/1/2012 (mmo). (Entered: 10/31/2012)
10/31/2012	467	Expert Report of Chris Heegard (March 1, 2012) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit 1 - Materials Considered, # 2 Exhibit 2 - Screen Shot) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	468	Expert Report of Leonard J. Cimini (October 25, 2011) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit A - Materials Considered) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	469	Expert Report of Brian Napper (April 15, 2012) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit 1 - CV, # 2 Exhibit 2 - Napper Testimony for Previous Five Years, # 3 Exhibit 3 - Publications of Brian W. Napper, # 4 Exhibit 4 - Documents Reviewed and Considered, # 5 Exhibit 5 - Reasonably Royalty Damages, # 6 Exhibit 6 - Reasonable Royalty Damages Limited to the '516 Patent Notification, # 7 Exhibit 7 - Reasonable Royalty Damages Based on Mulhern

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Opinion of Individual Patent Share,
[8](#) Exhibit 8 - Reasonable Royalty Damages Based on Mulhern
Opinion of Individual Patent Share Limited to the '516 Patent
Notification,
[9](#) Exhibit 9 - Per Unit Profitability of Accused Apple iPhone Products,
[10](#) Exhibit 10 - Per Unit Profitability of Accused Apple iPad Products,
[11](#) Exhibit 11 - Per Unit Profitability of Accused Apple AirPort Card
Products,
[12](#) Exhibit 12 - Per Unit Profitability of Accused Apple AirPort Base
Station Products,
[13](#) Exhibit 13 - Apple U.S. Sales of Accused Products,
[14](#) Exhibit 14 - Apple U.S. Sales of Accused Products - Average
Selling Price,
[15](#) Exhibit 15 - Apple U.S. Sales of Accused Products - Per Unit
Standard Cost,
[16](#) Exhibit 16 - Apple Worldwide Per Unit GAAP Line of Business
Reporting Apple Desktop and Laptop Computers,
[17](#) Exhibit 17 - Apple Worldwide Per Unit GAAP Line of Business
Reporting - Apple iPhone,
[18](#) Exhibit 18 - Apple Worldwide Per Unit GAAP Line of Business
Reportin - Aple iPad,
[19](#) Exhibit 19 - Motorola License Agreement Summary,
[20](#) Exhibit 20 - Apple License Agreement Summary,
[21](#) Exhibit 21 - Top Vendor Traditional Handset and Smartphone
Market Hardware Revenue,
[22](#) Exhibit 22 - Maximum Payment_Royalty Rate,
[23](#) Exhibit 23 - Theoretical Maximum Payment_Royalty Rate,
[24](#) Exhibit 24 - Theoretical Maximum Payment_Royalty Rate,
[25](#) Exhibit 25 - Theoretical Maximum Payment_Royalty Rate,
[26](#) Exhibit 26 - Theoretical Maximum Payment_Royalty Rate,
[27](#) Exhibit 27 - Apple's Actual v. Forecasted Units,
[28](#) Exhibit 28 - Motorola Android Product Sales - Units,
[29](#) Exhibit 29 - Motorola Global Mobile Devices Business Statement
of Operations,
[30](#) Exhibit 30 - Royalties paid to Motorola by Licensee (2006-2010),
[31](#) Exhibit 31 - Adjustment 1 to Mulhern's Lost Profit Calculation -
Adjusting Market Expansion Factor,
[32](#) Exhibit 32 - Adjustment 2 to Mulhern's Lost Profit Calculation -
Adjusting Motorola's Market Share,
[33](#) Exhibit 33 - Adjustment 3 to Mulhner's Lost Profit Calculation -
Adjusting Market Expansion Factor and Motorola's Market Share,
[34](#) Exhibit 34 - Estimated Motorola Benefit Due to Apple's Presence
in the Market) (Ernst, Samuel) (Entered: 10/31/2012)

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	470	Expert Report of Chris Heegard (March 22, 2012) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit A - Materials Considered) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	471	Expert Report of Chris Heegard (March 22, 2012) by Plaintiff Apple Inc. (Sealed Document) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	472	Expert Report of Chris Heegard (October 25, 2011) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit A - Materials Considered, # 2 Exhibit B - IMC Summary) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	473	Expert Report of Brian Napper (March 20, 2012) by Plaintiff Apple Inc. (Sealed Document) (Attachments: # 1 Exhibit 1 - Documents Reviewed, # 2 Exhibit 1.1 - CV, # 3 Exhibit 2 - Exemplary Shot Screens, # 4 Exhibit 2.1 - Previous Testimony, # 5 Exhibit 3 - Publications, # 6 Exhibit 4 - Documents Reviewed, # 7 Exhibit 5 - Summary of Motorola Accused Products, # 8 Exhibit 6.1 - Motorola Accused Products - Units Sold (Quarterly), # 9 Exhibit 6.2 - Motorola Accused Products - Unit Sold (Annual), # 10 Exhibit 7.1 - Motorola Accused Products - Revenue, Cost of Revenue and Gross Margin (Quarterly), # 11 Exhibit 7.2 - Motorola Accused Products - Revenue, Cost of Revenue and Gross Margin (Annual), # 12 Exhibit 8 - Motorola Global Mobile Device Business - Statement of Operations, # 13 Exhibit 9 - Motorola U.S. Mobile Device Business - Revenue, Cost of Revenue and Gross Margin, # 14 Exhibit 10 - Apple License Agreement Summary, # 15 Exhibit 11 - Motorola License Agreement Summary, # 16 Exhibit 12 - Motorola Lost Operating Profit from '647 Design Around (September 2009 - December 2009, # 17 Exhibit 13.1 - Summary of Damages, # 18 Exhibit 13.2 - Royalty Calculation for the '949 Patent, # 19 Exhibit 13.3 - Royalty Calculation for the '647 patent) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	474	Expert Report of J. Stevenson Kenney (March 1, 2012) by Plaintiff Apple Inc. (Sealed Document) (Ernst, Samuel) Modified on 11/1/2012; requested attorney refile with exhibits attached separately and described. (mmo). Removed disregard on 11/1/2012 (rep). (Entered: 10/31/2012)
10/31/2012	475	Exhibits to 483 Expert Report of Chris Heegard (September 15, 2011)

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		by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit A - CV, # 2 Exhibit B - Materials Reviewed, # 3 Exhibit C - Invalidity Claim Charts) (Ernst, Samuel) Modified on 11/1/2012; adobe error message for main document, requested attorney refile. (mmo). (Entered: 10/31/2012)
10/31/2012	476	Exhibits to 484 Expert Report of Chris Heegard (September 15, 2011) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Attachments: # 1 Exhibit A - CV, # 2 Exhibit B - List of Cases, # 3 Exhibit C - Materials Considered, # 4 Exhibit D - Invalidity Chart, # 5 Exhibit E - Invalidity Chart, # 6 Exhibit F - Invalidity Chart, # 7 Exhibit G - Invalidity Chart, # 8 Exhibit H - Invalidity Chart, # 9 Exhibit I - Invalidity Chart, # 10 Exhibit J - Invalidity Chart, # 11 Exhibit K - Invalidity Chart, # 12 Exhibit L - Invalidity Chart, # 13 Exhibit M - Invalidity Chart, # 14 Exhibit N - Invalidity Chart, # 15 Exhibit O - Invalidity Chat, # 16 Exhibit P - Invalidity Chart) (Ernst, Samuel) Modified on 11/1/2012; requested attorney refile; abode acrobat error with main document. (mmo). (Entered: 10/31/2012)
10/31/2012	477	Expert Report of Chris Heegard (October 25, 2011) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) Modified on 11/1/2012; requested attorney refile with exhibit attached separately and described. (mmo) Removed disregard on 11/1/2012. (rep) (Entered: 10/31/2012)
10/31/2012	478	Expert Report of Louis Berneman (September 15, 2011) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) Modified on 11/1/2012; requested attorney refile with exhibits attached separately and described. (mmo) Disregard removed on 11/1/2012. (rep) (Entered: 10/31/2012)
10/31/2012	479	Expert Report of Mark Lanning (July 13, 2011) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) Modified on 11/1/2012; requested attorney refile with exhibits attached separately and described. (mmo) Disregard removed on 11/1/2012. (rep) (Entered: 10/31/2012)
10/31/2012	480	Expert Report of Mark Lanning (May 23, 2011) by Plaintiff Apple Inc. (<u>Sealed Document</u>) (Ernst, Samuel) (Entered: 10/31/2012)
10/31/2012	481	Trial Brief <i>Motorola's Trial Brief</i> by Defendant Motorola Mobility, Inc. (<u>Sealed Document</u>) (Swedlow, Stephen) (Entered: 10/31/2012)

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11/01/2012	482	Minute Entry for proceedings held before District Judge Barbara B. Crabb: Final Pretrial Conference held on 11/1/2012. Trial predicted to last 9 days. [1:07] Attention: In the event of a settlement of this matter over the weekend, counsel are advised to contact the Clerk of Court at (608) 287-4875 or the Chief Deputy Clerk at (608) 354-8004. (Court Reporter LS.) (krj) (Entered: 11/01/2012)
11/01/2012	483	Expert Report of Chris Heegard (September 15, 2011) by Plaintiff Apple Inc. (Sealed Document) (Ernst, Samuel) Modified on 11/2/2012; see 475 for exhibits. (mmo) (Entered: 11/01/2012)
11/01/2012	484	Expert Report of Chris Heegard (September 15, 2011) by Plaintiff Apple Inc. (Sealed Document) (Ernst, Samuel) Modified on 11/2/2012; see 476 for exhibits. (mmo) (Entered: 11/01/2012)
11/02/2012	485	Final Pretrial Conference Order. Signed by District Judge Barbara B. Crabb on 11/2/12. (krj) (Entered: 11/02/2012)
11/02/2012	486	Transcript of final pretrial conference, held 11/1/12 before Judge Barbara B. Crabb. Court Reporter: LS. Please review the court policy regarding electronic transcripts: see Electronic Transcript Instructions and Notice of Intent to Request Redaction . (krj) (Entered: 11/02/2012)
11/02/2012	487	ORDER requiring response from the parties by 12:00 PM on Sunday, November 4, 2012. The parties should be prepared to discuss the issues identified in this order at 9:00 AM on Monday, November 5, and to commence the trial at 1:00 PM. Signed by District Judge Barbara B. Crabb on 11/2/2012. (arw) (Entered: 11/02/2012)
11/02/2012	488	Motion for Reconsideration <i>Whether Motorola Breached its Contracts by Seeking an Injunction in the Illinois Case and as Exclusionary Order in the International Trade Commission</i> re: 424 Order on Motion in Limine, Order on Motion to Strike, Order on Motion for Miscellaneous Relief, by Plaintiff Apple Inc. (Ernst, Samuel) Modified docket text on 11/5/2012. (mmo) (Entered: 11/02/2012)
11/03/2012	489	Motion to Exclude Motorola's Newly Disclosed FRAND Theories (SEALED) re: 481 Trial Brief (Sealed Document) by Plaintiff Apple Inc. Response due 11/13/2012. (Ernst, Samuel) (Entered: 11/03/2012)
11/03/2012	490	Declaration of Samuel F. Ernst filed by Plaintiff Apple Inc. <i>in Support of Apple's Motion to Exclude Motorola's Newly Disclosed FRAND Theories (SEALED)</i> re: 489 Motion for Miscellaneous Relief (Sealed Document) (Attachments: # 1 Exhibit 1 - Apple Inc.'s Fourth Set of Interrogatories (Nos. 18-25), # 2 Exhibit 2 - Motorola's Amended Objections and Responses to

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		Apple's Fourth Set of Interrogatories (Nos. 18-25) (SEALED) (Ernst, Samuel) (Entered: 11/03/2012)
11/03/2012	491	Motion to Enforce Summary Judgment Order Determination that ETSI's IPR Policy Unambiguously Requires Pre-Adoption Disclosure Where a Party Submits a Technical Proposal (SEALED) re: 194 Order on Motion for Partial Summary Judgment, Order on Motion for Summary Judgment (<u>Sealed Document</u>) by Plaintiff Apple Inc. Response due 11/13/2012. (Ernst, Samuel) (Entered: 11/03/2012)
11/03/2012	492	Declaration of Samuel F. Ernst filed by Plaintiff Apple Inc. <i>in Support of Apple's Motion to Enforce Summary Judgment Order Determination that ETSI's IPR Policy Unambiguously Requires Pre-Adoption Disclosure Where a Party Submits a Technical Proposal</i> re: 491 Motion for Miscellaneous Relief (Attachments: # 1 Exhibit 1 - Annex 1 IPR Information and Declaration Statement, dated Oct. 6, 2000 (MOTO-APPLE-0007144703-05), # 2 Exhibit 2 - Annex 1 IPR Information Statement, dated Oct. 27, 1999 (WI-178-011302-04) (Ernst, Samuel) (Entered: 11/03/2012)
11/03/2012	493	Motion to to Enforce Summary Judgment Order Determination that ETSI's IPR Policy Unambiguously Requires Pre-Adoption Disclosure Where a Party Submits a Technical Proposal (PUBLIC) re 194 Order on Motion for Partial Summary Judgment, Order on Motion for Summary Judgment,, by Plaintiff Apple Inc.. Response due 11/13/2012. (Ernst, Samuel) Modified on 11/5/2012; This document is the Public version of 491 . (mmo). (Entered: 11/03/2012)
11/03/2012	494	Motion to Exclude Motorola's Newly Disclosed FRAND Theories (PUBLIC) re: 481 Trial Brief by Plaintiff Apple Inc. Response due 11/13/2012. (Ernst, Samuel) (Entered: 11/03/2012)
11/03/2012	495	Declaration of Samuel F. Ernst filed by Plaintiff Apple Inc. <i>in Support of Apple's Motion to Exclude Motorola's Newly Disclosed FRAND Theories (PUBLIC)</i> re: 494 Motion for Miscellaneous Relief (Attachments: # 1 Exhibit 1 - Apple Inc.'s Fourth Set of Interrogatories (Nos. 18-25), # 2 Exhibit 2 - Motorola's Amended Objections and Responses to Apple's Fourth Set of Interrogatories (Nos. 18-25) (PUBLIC) (Ernst, Samuel) (Entered: 11/03/2012)
11/04/2012	496	Response re: 487 Order, <i>Motorola's Brief Regarding Jurisdiction and Availability of Remedies</i> by Defendant Motorola Mobility, Inc. (Swedlow, Stephen) (Entered: 11/04/2012)
11/04/2012	497	Response re: 487 Order, <i>Apple's Response to the Court's Order of November 2, 2012</i> by Plaintiff Apple Inc. (Ernst, Samuel) (Entered: 11/04/2012)

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11/05/2012	498	Minute Entry for proceedings held before District Judge Barbara B. Crabb: Hearing held on 11/5/2012. [1:57] (Court Reporter LS.) (krj) (Entered: 11/05/2012)
11/05/2012	499	Memorandum regarding the court's jurisdiction and the nature of any dismissal by Plaintiff Apple Inc. (krj) (Entered: 11/05/2012)
11/06/2012	500	Transcript of First Day of Court Trial, held 11/5/2012 before Judge Barbara B. Crabb. Court Reporter: LS. Please review the court policy regarding electronic transcripts: see Electronic Transcript Instructions and Notice of Intent to Request Redaction . (arw) (Entered: 11/06/2012)
11/07/2012	501	Motion for Leave to Respond re: 499 Notice (Other) by Defendant Motorola Mobility, Inc. Response due 11/14/2012. (Swedlow, Stephen) (Entered: 11/07/2012)
11/08/2012	502	** TEXT ONLY ORDER ** ORDER granting 501 Motion for Leave to Respond re 499 Memorandum regarding the court's jurisdiction and the nature of any dismissal. Signed by District Judge Barbara B. Crabb on 11/8/2012. (lak) (Entered: 11/08/2012)
11/08/2012	503	ORDER denying as moot 488 Motion for Reconsideration; denying as moot 489 Motion to Exclude Motorola's Newly Disclosed FRAND Theories; denying as moot 491 Motion to Enforce Summary Judgment Order Determination that ETSI's IPR Policy Unambiguously Requires Pre-Adoption Disclosure Where a Party Submits a Technical Proposal. This case is DISMISSED. The court will decide whether dismissal is with or without prejudice after the parties have completed briefing on the issue. Signed by District Judge Barbara B. Crabb on 11/8/2012. (arw) (Entered: 11/08/2012)
11/13/2012		Dismissal with or without Prejudice. (arw) (Entered: 11/13/2012)
11/14/2012	504	Response re: 502 Order on Motion for Miscellaneous Relief <i>Motorola's Response to Apple's Bench Memorandum regarding the Court's Jurisdiction and the Nature of Any Dismissal</i> by Defendant Motorola Mobility, Inc.. (Swedlow, Stephen) (Entered: 11/14/2012)
11/15/2012	505	Motion for Leave to File <i>Apple's Motion for Leave to Reply to Motorola's Response Brief Regarding the Nature of Dismissal</i> by Plaintiff Apple Inc. (Ernst, Samuel) (Entered: 11/15/2012)
11/15/2012	506	Brief in Reply <i>Regarding the Proper Form of Any Dismissal</i> by Plaintiff Apple Inc. (Ernst, Samuel) Modified on 11/19/2012. (arw) (Entered: 11/15/2012)
11/15/2012	507	Declaration of Samuel F. Ernst filed by Plaintiff Apple Inc. <i>In Support</i>

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		<i>of Apple's Reply Regarding the Proper Form of Any Dismissal</i> re: 505 Motion for Leave to File (Attachments: # 1 Exhibit 1 - Letter from Bruce Sewell to Kent Walker dated November 8, 2012, # 2 Exhibit 2 - Letter from Kent Walker to Bruce Sewell dated November 13, 2012) (Ernst, Samuel) (Entered: 11/15/2012)
11/19/2012	508	Brief in Opposition by Defendant Motorola Mobility, Inc. re: 505 Motion for Leave to File filed by Apple Inc. (Swedlow, Stephen) (Entered: 11/19/2012)
11/28/2012	509	ORDER dismissing with prejudice Apple Inc.'s claims that Motorola Mobility, Inc. violated § 2 of the Sherman Act (count 5), violated Cal. Bus. & Prof. Code § 17200 (count 6), and tortiously interfered with contracts (count 13); dismissing without prejudice Apple's claims against Motorola for equitable estoppel (count 1), breach of contract (counts 2, 3 and 4) and declaratory judgment (counts 7, 11 and 12). Signed by District Judge Barbara B. Crabb on 11/28/2012. (arw) (Entered: 11/28/2012)
12/05/2012	510	JUDGMENT entered in favor of defendant Motorola Mobility, Inc. dismissing with prejudice plaintiff Apple Inc.'s claims that defendant violated § 2 of the Sherman Act (count 5), violated Cal. Bus. & Prof. Code § 17200 (count 6), and tortiously interfered with contracts (count 13); and dismissing without prejudice plaintiff's claims against defendant for equitable estoppel (count 1), breach of contract (counts 2, 3 and 4), and declaratory judgment (counts 7, 11 and 12). (PAO) (arw) (Entered: 12/05/2012)
01/04/2013	511	NOTICE OF APPEAL - FEDERAL CIRCUIT by Plaintiff Apple Inc., Counter Defendant Apple Inc. as to 510 Judgment,,. Filing fee of \$ 455, receipt number 0758-1105242 paid. (Fram, Robert) (Entered: 01/04/2013)

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Description:	Docket Report	Search Criteria:	3:11-cv-00178-bbc
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REMOVED DUE TO CONFIDENTIAL MATERIAL

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UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C.

In the Matter of

**CERTAIN WIRELESS
COMMUNICATION DEVICES,
PORTABLE MUSIC and DATA
PROCESSING DEVICES, COMPUTERS
AND COMPONENTS THEREOF**

Investigation No. 337-TA-_____

**CORRECTED VERIFIED COMPLAINT UNDER SECTION 337 OF THE
TARIFF ACT OF 1930, AS AMENDED**

Complainant

Motorola Mobility, Inc.
600 North US Highway 45
Libertyville, Illinois 60048
Phone No. (847) 523-5000

Respondent

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Cupertino, California 95014
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Exhibit 2	Certified Copy of United States Patent No. 6,246,862
Exhibit 3	Certified Copy of United States Patent No. 6,246,697
Exhibit 4	Certified Copy of United States Patent No. 5,359,317
Exhibit 5	Certified Copy of United States Patent No. 5,636,223
Exhibit 6	Certified Copy of United States Patent No. 7,751,826
Exhibit 7	Certified Copy of the Assignment of United States Patent No. 6,272,333
Exhibit 8	Certified Copy of the Assignment of United States Patent No. 6,246,862
Exhibit 9	Certified Copy of the Assignment of United States Patent No. 6,246,697
Exhibit 10	Certified Copy of the Assignment of United States Patent No. 5,359,317
Exhibit 11	Certified Copy of the Assignment of United States Patent No. 5,636,223
Exhibit 12	Certified Copy of the Assignment of United States Patent No. 7,751,826
Exhibit 13	Relevant Pages of Motorola's Form 10-Q for the Period Ended July 3, 2010
Exhibit 14	Relevant Pages of Motorola's 2009 Annual Report
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Exhibit 16	"Motorola Timeline," <i>available at</i> http://www.motorola.com/staticfiles/Business/Corporate/US-EN/history/timeline.html
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Exhibit 35	Motorola Droid 2 User Guide
Exhibit 36	iPhone 4 Wi-Fi Certified Interoperability Certificate
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Exhibit 50	Domestic Industry Claim Chart for Representative Claim of United States Patent No. 7,751,826
Exhibit 51	Domestic Industry Claim Chart for Representative Claim of United States Patent No. 6,272,333
Exhibit 52	Domestic Industry Claim Chart for Representative Claim of United States Patent No. 6,246,862
Exhibit 53	Domestic Industry Claim Chart for Representative Claim of United States Patent No. 6,246,697

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Confidential Exhibits	Description
Confidential Exhibit A	Identification of Licenses Relating to the Asserted Patents
Confidential Exhibit B	Motorola Licensing Group Data
Confidential Exhibit C	Amended and Restated Intellectual Property Assignment Agreement between Motorola, Inc. and Motorola Mobility, Inc.
Confidential Exhibit D	United States Personnel Data for Motorola's Mobile Devices Segment
Confidential Exhibit E	United States Facilities Data for Motorola's Mobile Devices Segment
Confidential Exhibit F	United States Sales Data for Representative Domestic Industry Products and Mobile Devices Segment
Confidential Exhibit G	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit H	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit I	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit J	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit K	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit L	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit M	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit N	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit O	License Between Motorola, Inc., and Licensee Confidential []
Confidential Exhibit P	First Amendment to License Between Motorola, Inc. and Licensees Confidential []
Confidential Exhibit Q	Second Amendment to License Between Motorola, Inc. and Licensees Confidential []
Confidential Exhibit R	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit S	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit T	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit U	License Between Motorola, Inc. and Licensee Confidential []

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Confidential Exhibit V	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit W	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit X	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit Y	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit Z	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit AA	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit BB	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit CC	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit DD	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit EE	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit FF	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit GG	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit HH	License and Amendment Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit II	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit JJ	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit KK	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit LL	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit MM	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit NN	License Between Motorola, Inc. and Licensee Confidential []
Confidential Exhibit OO	Contribution, Assignment and Assumption Agreement dated July 31, 2010
Confidential Exhibit PP	License Between Motorola, Inc. and Licensee Confidential []

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Appendices	Description
Appendix A	Certified File History of United States Patent No. 6,272,333
Appendix B	Certified File History of United States Patent No. 6,246,862
Appendix C	Certified File History of United States Patent No. 6,246,697
Appendix D	Certified File History of United States Patent No. 5,537,317
Appendix E	Certified File History of United States Patent No. 5,636,223
Appendix F	Certified File History of United States Patent No. 7,751,826
Appendix G	Technical References Cited in U.S. Patent No. 6,272,333
Appendix H	Technical References Cited in U.S. Patent No. 6,246,862
Appendix I	Technical References Cited in U.S. Patent No. 6,246,697
Appendix J	Technical References Cited in U.S. Patent No. 5,359,317
Appendix K	Technical References Cited in U.S. Patent No. 5,636,223
Appendix L	Technical References Cited in U.S. Patent No. 7,751,826
Appendix M	File History of Reexamination No. 90/010,332 for U.S. Patent No. 5,359,317
Appendix N	File History of Reexamination No. 90/010,445 for U.S. Patent No. 5,359,317
Appendix O	File History of Reexamination No. 90/010,802 for U.S. Patent No. 5,636,223

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I. INTRODUCTION

1. Motorola Mobility, Inc. (“Mobility”) respectfully requests that the United States International Trade Commission (“Commission”) institute an investigation into violations of Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337 (“Section 337”).¹

2. Apple Inc. (“Apple” or “Respondent”) has engaged in unfair acts in violation of Section 337 through unlawful and unauthorized importation and/or sale for importation into the United States, and/or the sale within the United States after importation, of certain wireless communications devices, portable music and data processing devices, computers and components thereof (hereinafter collectively “Accused Products”). The Accused Products infringe one or more claims of United States Patent Nos. 6,272,333 (“the ‘333 Patent”), 6,246,862 (“the ‘862 Patent”), 6,246,697 (“the ‘697 Patent”), 5,359,317 (“the ‘317 Patent”), 5,636,223 (“the ‘223 Patent”), and 7,751,826 (“the ‘826 Patent”) (collectively the “Asserted Patents”) through their importation, sale for importation, use after importation, and sale after importation. *See* Exhs. 19-24.

3. As of the filing of this Complaint, Mobility owns by assignment the entire right, title and interest in and to the Asserted Patents. *See* Exhs. 7-12 (assignments of each Asserted Patent from the named inventors to Motorola), Conf. Exh. C (July 31, 2010 assignment of the Asserted Patents from Motorola to Mobility).² Pursuant to a Form 10 filed with the Securities

¹ As discussed below, Motorola, Inc. (“Motorola”) assigned the Asserted Patents to Mobility on July 31, 2010. Motorola also has transferred the relevant mobile devices business to Mobility. Prior to July 31, 2010, Motorola owned the Asserted Patents and the relevant mobile device business. As a result, where appropriate this Complaint will refer to the past and present business activities of Complainant and Motorola.

² At the earliest practicable time following recordation by the USPTO of the assignments of the Asserted Patents from Motorola to Mobility and the issuance of certified copies thereof, Complainant will provide the Commission with certified copies of the relevant assignments.

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and Exchange Commission on July 1, 2010, Motorola transferred its mobile devices and home business units to Mobility and assigned the Asserted Patents to Mobility. In the first quarter of 2011, Mobility will be acquired by Motorola SpinCo Holdings Corp. ("SpinCo"). Complainant will provide the Commission with appropriate documentation as soon as practicable following the transfer of Mobility to SpinCo.

4. Motorola's and Mobility's historic and current operations in the United States qualify as a domestic industry relating to the Asserted Patents and articles protected by the Asserted Patents, within the meaning of 19 U.S.C. § 1337(a)(2) & (3).

5. Mobility's current business operations, previously owned by Motorola, include the Mobile Devices segment ("MDS"), which conducts research and development to develop new technology related to wireless handsets with integrated software and accessory products, and designs, manufactures, sells and services wireless handsets with integrated software and accessory products. Motorola and Mobility also have licensed and continue to actively license the intellectual property relating to the MDS segment, including the Asserted Patents.³

6. MDS designs, develops, markets, sells and services in the United States products that practice one or more claims of the Asserted Patents. Research and development of intellectual property relating to MDS was and is an integral part of Motorola's extensive domestic licensing program and is an integral part of Mobility's extensive domestic licensing program which includes licenses to the Asserted Patents. Indeed, research and development of intellectual property relating to MDS resulted in each of the Asserted Patents.

³ Pursuant to a Contribution, Assignment and Assumption Agreement dated July 31, 2010 ("the Contribution Agreement"), Mobility acquired the right, title, and interest in certain licenses related to the Asserted Patents, which are identified in Schedule 1.1(a) of the Contribution Agreement. See Conf. Exh. OO. Other licenses related to the Asserted Patents identified in Schedule 1.1(e)(ii) of the Contribution Agreement were retained by Motorola.

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7. Complainant seeks relief from the Commission in the form of a permanent exclusion order prohibiting entry into the United States of the Accused Products that infringe one or more claims of the Asserted Patents. Complainant further seeks a cease and desist order prohibiting Respondent, its subsidiaries, related companies and agents from engaging in the importation, sale for importation, marketing and/or advertising, distribution, offering for sale, sale, sale after importation or other transfers within the United States after importation of the Accused Products that infringe one or more claims of the Asserted Patents.

II. PARTIES

A. Complainant

8. Mobility is a corporation organized and existing under the laws of the State of Delaware and having a principal place of business at 600 North US Highway 45, Libertyville, Illinois 60048. Mobility is a wholly-owned subsidiary of Motorola. Relevant excerpts of Motorola's Form 10-Q's for the period ended July 3, 2010 and its 2009 Annual Report, which describe MDS now operated by Mobility, are attached as Exhibits 13 and 14, respectively.

9. On July 1, 2010, SpinCo filed a Form 10 (General Form for the Registration of Securities), which is attached as Exhibit 47. As noted in the Form 10, Motorola intends to transfer its mobile devices and home businesses to SpinCo in the first quarter of 2011. In furtherance of the planned transfer, Motorola assigned all its right, title, and interest in the Asserted Patents to Mobility on July 31, 2010, and also transferred MDS to Mobility. Mobility also acquired all licensing operations related to the Asserted Patents. Moreover, Mobility acquired several licenses related to the Asserted Patents, while other licenses related to the Asserted Patents were retained by Motorola. *See* Conf. Exh. OO, Schedule 1.1(a) (licenses transferred to Mobility), Schedule 1.1(e)(ii) (licenses retained by Motorola). In the first quarter

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of 2011, Mobility will be acquired by SpinCo, and Mobility will continue to operate MDS and own the Asserted Patents.

10. As a result of long-term domestic activities, including those undertaken by the MDS, Motorola and Mobility are leading innovators in the communications and electronics industry. From the introduction of its first commercially successful car radio in 1930 to the inception of the world's first commercial portable cellular phone in 1983, Motorola and Mobility have developed substantial proprietary and leading technology relating to wireless communications and electronics. *See* Exh. 15 (excerpt from Motorola's website). Motorola was also the first to bring push-to-talk over cellular to market. More recently, Motorola demonstrated the world's first WiMAX 802.16e mobile handoff and the industry's first over-the-air data sessions in the 700 MHz spectrum using the Long Term Evolution standard, which is the next evolution of mobile broadband. *See* Exh. 16 (excerpt from Motorola's website).

11. Among other things, MDS designs, manufactures, sells, and services wireless handsets with integrated software and accessory products. In 2009, MDS's net sales were \$7.1 billion, representing approximately 32% of the company's consolidated net sales for 2009. The net sales for MDS were \$12.1 billion in 2008. *See* Exh. 14 at 36.

12. Motorola and Mobility have commercialized and continue to actively commercialize the patented technologies and license these patents, including the Asserted Patents, to other major manufacturers and retailers of wireless handheld devices and other communications products. *See* Conf. Exh. A (listing licenses involving the Asserted Patents).

13. Motorola's research and development expenditures in the United States relating to technology advancement, new product development, and product improvement, which include domestic research and development expenditures by MDS, were \$3.2 billion in 2009,

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\$4.1 billion in 2008 and \$4.4 billion in 2007. *See* Exh. 14 at 15. Motorola and Mobility continue to believe that a strong domestic commitment to research and development is required to drive long-term growth of the companies. Approximately 22,000 professional employees were engaged in research and development activities during 2009. *See id.* As of December 31, 2009, Motorola and its wholly-owned subsidiaries owned approximately 10,000 patents in the United States and over 13,000 patents in foreign countries. *See id.* Many of the patents owned by Motorola and Mobility are used in their operations or licensed for use by others. *See id.*

14. Motorola has granted licenses of varying scope under many of its patents, including the Asserted Patents, to various companies. *See* Conf. Exh. A. Motorola's licensing activities have yielded substantial revenue to the company and its shareholders. Confidential Exhibit B sets forth the royalty income from certain of MDS's patent licenses in the past three fiscal years. Mobility actively continues Motorola's extensive domestic licensing activities.

B. The Respondent

15. Respondent Apple Inc. is a corporation organized under the laws of California and has its principal place of business at 1 Infinite Loop, Cupertino, California 95014.

16. Respondent imports and/or sells for importation into the United States, and/or sells within the United States after importation certain wireless communications devices, portable music and data processing devices, computers, and components thereof without the authorization of Motorola or Mobility. Respondent has facilities around the world, including retail stores in the United States to directly sell the Accused Products to end users. *See* Exh. 17.

III. ACCUSED PRODUCTS AT ISSUE

17. Respondent designs, imports, sells for importation into the United States, and/or sells within the United States after importation, certain wireless communication devices, portable music and data processing devices, computers, and components thereof.

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18. The accused wireless communication devices include, but are not limited to, the Apple iPhone 3G, the Apple iPhone 3GS and the Apple iPhone 4. These devices utilize various wireless technologies that, for example, establish data connections with wireless networks, transmit voice and data signals to wireless networks, receive voice and data signals from a wireless network, download and execute user applications and process and encrypt data during a wireless communication session.

19. The accused portable music and data processing devices include, but are not limited to, the iPod touch, which utilizes wireless communication technologies to communicate with wireless network access points and other wireless devices.

20. The accused computers include, but are not limited to, the AppleTV, Mac Pro, iMac, Mac mini, MacBook Pro, MacBook, MacBook Air, iPad and iPad 3G, which utilize wireless communication technologies to communicate with wireless network access points and other wireless devices. The iPad 3G also uses authentication protocols, encryption techniques and other wireless transmission technologies to communicate with third generation wireless communication networks.

21. Each of the Accused Products meets each and every limitation of at least one claim of one or more of the Asserted Patents. The Accused Products include, but are not limited to, all versions of the above-referenced products, as well as certain software and services that are distributed as components of these devices. These products, however, are merely illustrative of the types and classes of infringing products that Respondent manufactures and imports into the United States, sells for importation into the United States, and/or sells within the United States after importation in violation of Section 337.

♦PUBLIC VERSION♦

IV. THE ASSERTED PATENTS AND NON-TECHNICAL DESCRIPTION OF THE ASSERTED PATENTS

A. The '333 Patent

1. Identification of the '333 Patent and Ownership

22. Mobility owns by assignment the entire right, title and interest in United States Patent No. 6,272,333, titled "Method and Apparatus in a Wireless Communication System for Controlling a Delivery of Data," which issued on August 7, 2001, naming Dwight Randall Smith as inventor. A certified copy of the '333 Patent is attached as Exhibit 1; a certified copy of the recorded assignment from the named inventors to Motorola is attached as Exhibit 7. A copy of the July 31, 2010 assignment of the '333 Patent from Motorola to Mobility is attached as Confidential Exhibit C, and Complainant will submit a certified copy of this assignment once it is recorded at the United States Patent and Trademark Office.

23. Pursuant to Commission Rule 210.12, a certified copy and three additional copies of the prosecution history of the '333 Patent, as well as four copies of the '333 Patent and each technical reference mentioned in the prosecution history of the '333 Patent, are submitted concurrently herewith as Appendices A and G, respectively.

2. Foreign Counterparts to the '333 Patent

24. Pursuant to Commission Rule 210.12(a)(9)(v), and as indicated in Exhibit 18, no foreign patents or patent applications corresponding to the '333 Patent have been issued, abandoned, rejected, or remain pending.

♦PUBLIC VERSION♦

3. Non-Technical Description of the '333 Patent⁴

25. The '333 Patent generally relates to controlling applications and the transmission of data in wireless communication systems. Particularly, in a wireless device, such as a smartphone, the invention allows the device to maintain a list of applications accessible to the device. When the accessibility of a particular application is changed, such as when a user deletes an application from the smartphone, the list of applications accessible to the device is updated, and the change is communicated from the mobile device to the fixed portion of the wireless communication system. By maintaining a list of applications presently available to a user on the user's mobile device, data and software updates relevant to the user can be more efficiently provided to the user. The invention of the '333 Patent provides an efficient means to update the applications available to a user of a wireless communication device, while minimizing unnecessary data transfers in a wireless communication network.

4. Prior Litigation Involving the '333 Patent

26. On January 22, 2010, Motorola filed a Complaint with the U.S. International Trade Commission to commence an investigation based on, *inter alia*, the alleged infringement of the '333 Patent by Respondents Research In Motion Limited and Research In Motion Corporation. Pursuant to the Complaint, an investigation was instituted styled as *Certain Wireless Communications System Server Software, Wireless Handheld Devices and Battery Packs*, Inv. No. 337-TA-706. On June 29, 2010, the presiding Administrative Law Judge granted a joint motion to terminate the investigation pursuant to a settlement agreement between the parties. The '333 Patent has not been the subject of any other previous litigation in any

⁴ The non-technical descriptions of the inventions claimed in the Asserted Patents as set forth in this Complaint are not intended to construe either the specification or the claims of the Asserted Patents.

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domestic court or agency. In addition, there has been no foreign court or agency litigation involving the '333 Patent.

27. The '333 Patent, however, is the subject of a complaint filed concurrently herewith by Mobility against Apple in the United States District Court for the Northern District of Illinois that alleges infringement of, among others, the '333 Patent.

B. The '862 Patent

1. Identification of the '862 Patent and Ownership

28. Mobility owns by assignment the entire right, title and interest in United States Patent No. 6,246,862, titled "Sensor Controlled User Interface for Portable Communication Device," which issued on June 12, 2001, naming Chris J. Grivas, Rachid M. Alameh, and Fan He as inventors. A certified copy of the '862 Patent is attached as Exhibit 2; a certified copy of the recorded assignment from the named inventors to Motorola is attached as Exhibit 8. A copy of the July 31, 2010 assignment of the '862 Patent from Motorola to Mobility is attached as Confidential Exhibit C, and Complainant will submit a certified copy of this assignment once it is recorded at the United States Patent and Trademark Office.

29. Pursuant to Commission Rule 210.12, a certified copy and three additional copies of the prosecution history of the '862 Patent, as well as four copies of the '862 Patent and each technical reference mentioned in the prosecution history of the '862 Patent, are submitted concurrently herewith as Appendices B and H, respectively.

2. Foreign Counterparts to the '862 Patent

30. Pursuant to Commission Rule 210.12(a)(9)(v), Exhibit 18 identifies the foreign patents or patent applications corresponding to the '862 Patent that have been issued, abandoned, rejected, or remain pending.

♦PUBLIC VERSION♦

3. Non-Technical Description of the '862 Patent⁵

31. The '862 Patent generally relates to a system for controlling the operation of a user interface (such as a touch screen) in a wireless device, such as a smartphone. The invention provides a sensor in the wireless device that senses the proximity of the device to a large solid object (like a user's head). When the sensor determines the wireless device is in close proximity to such an object, the system inhibits the operation of the touch screen so that the user does not inadvertently make undesired inputs to the device, like hanging up the call or dialing unwanted numbers. So, for example, if the user is on a call and the touch screen is near the user's head, the phone will not accept unwanted inputs made as a result of the user's unintended contact with certain inputs on the touch screen during the call.

4. Prior Litigation Involving the '862 Patent

32. The '862 Patent has not been the subject of previous litigation in any domestic court or agency. In addition, there has been no foreign court or agency litigation involving the '862 Patent or any of its counterparts.

33. The '862 Patent, however, is the subject of a complaint filed concurrently herewith by Mobility against Apple in the United States District Court for the Northern District of Illinois that alleges infringement of, among others, the '862 Patent.

C. The '697 Patent

1. Identification of the '697 Patent and Ownership

34. Mobility owns by assignment the entire right, title and interest in United States Patent No. 6,246,697, titled "Method and System for Generating a Complex Pseudonoise Sequence for Processing a Code Division Multiple Access Signal," which issued on June 12,

⁵ The non-technical descriptions of the inventions claimed in the Asserted Patents as set forth in this Complaint are not intended to construe either the specification or the claims of the Asserted Patents.

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2001, naming Nicholas William Whinnett and Kevin Michael Laird as inventors. A certified copy of the '697 Patent is attached as Exhibit 3; a certified copy of the recorded assignment from the named inventors to Motorola is attached as Exhibit 9. A copy of the July 31, 2010 assignment of the '697 Patent from Motorola to Mobility is attached as Confidential Exhibit C, and Complainant will submit a certified copy of this assignment once it is recorded at the United States Patent and Trademark Office.

35. Pursuant to Commission Rule 210.12, a certified copy and three additional copies of the prosecution history of the '697 Patent, as well as four copies of the '697 Patent and each technical reference mentioned in the prosecution history of the '697 Patent, are submitted concurrently herewith as Appendices C and I, respectively.

2. Foreign Counterparts to the '697 Patent

36. Pursuant to Commission Rule 210.12(a)(9)(v), Exhibit 18 identifies the foreign patents or patent applications corresponding to the '697 Patent that have been issued, abandoned, rejected, or remain pending.

3. Non-Technical Description of the '697 Patent⁶

37. The '697 Patent generally relates to transmitting voice and data signals in wireless communication systems. Particularly, in a wireless device, such as a smartphone, the invention allows the device to transmit voice and data signals to the fixed portion of a wireless communication system in a way that reduces noise in the signal (thus enhancing the ability of the signal to be received), while minimizing interference with signals from other user's mobile devices.

⁶ The non-technical descriptions of the inventions claimed in the Asserted Patents as set forth in this Complaint are not intended to construe either the specification or the claims of the Asserted Patents.

♦PUBLIC VERSION♦

4. Prior Litigation Involving the '697 Patent

38. The '697 Patent has not been the subject of previous litigation in any domestic court or agency. In addition, there has been no foreign court or agency litigation involving the '697 Patent or any of its counterparts.

39. The '697 Patent, however, is the subject of a complaint filed concurrently herewith by Mobility against Apple in the United States District Court for the Northern District of Illinois that alleges infringement of, among others, the '697 Patent.

D. The '317 Patent

1. Identification of the '317 Patent and Ownership

40. Mobility owns by assignment the entire right, title and interest in United States Patent No. 5,359,317, titled "Method and Apparatus for Selectively Storing a Portion of a Received Message in a Selective Call Receiver," which issued on October 25, 1994, naming Fernando Gomez and Mark Stair as inventors.

41. On November 7, 2008, a third party filed a request for ex parte reexamination of the '317 Patent, which was assigned Control No. 90/010,332. On February 3, 2009, the Patent Office denied the request for ex parte reexamination because it found the references cited in the request did not raise a substantial new question of patentability regarding the '317 Patent. The third party then filed a petition seeking review of the denial of the reexamination request. On March 22, 2010, the Patent Office denied the petition because it found the references cited in the request did not raise a substantial new question of patentability regarding the '317 Patent.

42. On March 17, 2009, a third party filed a second request for ex parte reexamination of the '317 Patent, which was assigned Control No. 90/010,455. On June 8, 2010, the Patent Office issued an ex parte reexamination certificate, which confirmed the

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patentability of claims 1-6, 9-11, 13-19, 21, and 22. Claims 7, 8, 12 and 20 were not reexamined.

43. A certified copy of the '317 Patent is attached as Exhibit 4; a certified copy of the recorded assignment from the named inventors to Motorola is attached as Exhibit 10. A copy of the July 31, 2010 assignment of the '317 Patent from Motorola to Mobility is attached as Confidential Exhibit C, and Complainant will submit a certified copy of this assignment once it is recorded at the United States Patent and Trademark Office.

44. Pursuant to Commission Rule 210.12, a certified copy and three additional copies of the prosecution history of the '317 Patent, as well as four copies of the '317 Patent and each technical reference mentioned in the prosecution history of the '317 Patent, are submitted concurrently herewith as Appendices D and J, respectively. A copy and three additional copies of the prosecution histories for Reexamination Request Nos. 90/010,332 and 90/010,455 and each technical reference mentioned therein, are submitted concurrently herewith as Appendices M and N, respectively.⁷

2. Foreign Counterparts to the '317 Patent

45. Pursuant to Commission Rule 210.12(a)(9)(v), Exhibit 18 identifies the foreign patents or patent applications corresponding to the '317 Patent that have been issued, abandoned, rejected, or remain pending.

⁷ Complainant has ordered a certified copy of the prosecution histories of Reexamination Request Nos. 90/010,332 and 90/010,455, and will submit them as soon as possible.

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3. Non-Technical Description of the '317 Patent⁸

46. The '317 Patent invention generally relates to selective call receivers. The patent discloses, *inter alia*, a method and apparatus for selectively storing a portion of a received message by a user in one of the many memory partitions that corresponds to a particular file type.

4. Prior Litigation Involving the '317 Patent

47. On January 22, 2010, Motorola filed a Complaint with the U.S. International Trade Commission to commence an investigation based on, *inter alia*, the alleged infringement of the '317 Patent by Respondents Research In Motion Limited and Research In Motion Corporation. Pursuant to the Complaint, an investigation was instituted styled as *Certain Wireless Communications System Server Software, Wireless Handheld Devices and Battery Packs*, Inv. No. 337-TA-706. On June 29, 2010, the presiding Administrative Law Judge granted a joint motion to terminate the investigation pursuant to a settlement agreement between the parties.

48. On February 20, 2008, Motorola filed an Amended Complaint in the United States District Court for the Northern District of Texas, which was assigned Civil Action No. 3:09-cv-0072-K. In the Complaint, Motorola alleged, *inter alia*, infringement of the '317 Patent by Research In Motion Limited and Research In Motion Corporation. On June 25, 2010, the District Court granted a joint motion to dismiss the action pursuant to a settlement agreement between the parties.

⁸ The non-technical descriptions of the inventions claimed in the Asserted Patents as set forth in this Complaint are not intended to construe either the specification or the claims of the Asserted Patents.

♦PUBLIC VERSION♦

49. The '317 Patent has not been the subject of any other previous litigation in any domestic court or agency. In addition, there has been no foreign court or agency litigation involving the '317 Patent or any of its counterparts.

50. The '317 Patent, however, is the subject of a complaint filed concurrently herewith by Mobility against Apple in the United States District Court for the Northern District of Illinois that alleges infringement of, among others, the '317 Patent.

E. The '223 Patent

1. Identification of the '223 Patent and Ownership

51. Mobility owns by assignment the entire right, title and interest in United States Patent No. 5,636,223, titled "Methods of Adaptive Channel Access Attempts," which issued on June 3, 1997, naming Karl Reardon and Bud Fraser as inventors.

52. On March 15, 2010, the United States Patent and Trademark Office granted a request for ex parte reexamination of claims 1–12 of the '223 patent. The art cited by the ex parte requester is cumulative of that already considered by the Patent and Trademark Office during initial examination of the '223 patent. Thus, no new issues regarding the viability of the patent claims have been raised. A final determination has not yet been reached in these proceedings.

53. A certified copy of the '223 Patent is attached as Exhibit 5; a certified copy of the recorded assignment from the named inventors to Motorola is attached as Exhibit 11. A copy of the July 31, 2010 assignment of the '223 Patent from Motorola to Mobility is attached as Confidential Exhibit C, and Complainant will submit a certified copy of this assignment once it is recorded at the United States Patent and Trademark Office.

54. Pursuant to Commission Rule 210.12, a certified copy and three additional copies of the prosecution history of the '223 Patent, as well as four copies of the '223 Patent

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and each technical reference mentioned in the prosecution history of the '223 Patent, are submitted concurrently herewith as Appendices E and K, respectively. A copy and three additional copies of the prosecution history for Reexamination Request No. 90/010,802 and each technical reference mentioned therein, is submitted concurrently herewith as Appendix O.⁹

2. Foreign Counterparts to the '223 Patent

55. Pursuant to Commission Rule 210.12(a)(9)(v), Exhibit 18 identifies the foreign patents or patent applications corresponding to the '223 Patent that have been issued, abandoned, rejected, or remain pending.

3. Non-Technical Description of the '223 Patent¹⁰

56. The '223 Patent generally relates to communication systems and methods of adaptable channel access in data communications systems. For example, the '223 Patent discloses a method of adaptable channel access that is practiced at a terminal, where, if a channel is busy, the terminal will wait a priority-based random amount of time before trying again. In this manner, the '223 Patent enabled the efficient utilization of communication resources.

4. Prior Litigation Involving the '223 Patent

57. On October 14, 2009, Motorola filed First Amended Counterclaims in the United States District Court for the Northern District of Texas, in Civil Action No. 3:08-cv-0284-G. In the Amended Counterclaims, Motorola alleged, *inter alia*, infringement of the '223 Patent by Research In Motion Limited and Research In Motion Corporation. On June 25, 2010, the

⁹ Complainant has ordered a certified copy of the prosecution history of Reexamination Request No. 90/010,802, and will submit it as soon as possible.

¹⁰ The non-technical descriptions of the inventions claimed in the Asserted Patents as set forth in this Complaint are not intended to construe either the specification or the claims of the Asserted Patents.

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District Court granted a joint motion to dismiss the action pursuant to a settlement agreement between the parties.

58. The '223 Patent has not been the subject of any other previous litigation in any domestic court or agency. In addition, there has been no foreign court or agency litigation involving the '223 Patent or any of its counterparts.

59. The '223 Patent, however, is the subject of a complaint filed concurrently herewith by Mobility against Apple in the United States District Court for the Northern District of Illinois that alleges infringement of, among others, the '223 Patent.

F. The '826 Patent

1. Identification of the '826 Patent and Ownership

60. Motorola owns by assignment the entire right, title and interest in United States Patent No. 7,751,826, titled "System and Method for E911 Location Privacy Protection," which issued on July 6, 2010, naming Michael Gardner, Wayne Ballantyne, and Zaffer Merchant as inventors. A certified copy of the '826 Patent is attached as Exhibit 6; a certified copy of the recorded assignment from the named inventors to Motorola is attached as Exhibit 12. A copy of the July 31, 2010 assignment of the '826 Patent from Motorola to Mobility is attached as Confidential Exhibit C, and Complainant will submit a certified copy of this assignment once it is recorded at the United States Patent and Trademark Office.

61. Pursuant to Commission Rule 210.12, a certified copy and three additional copies of the prosecution history of the '826 Patent, as well as four copies of the '826 Patent and each technical reference mentioned in the prosecution history of the '826 Patent, are submitted concurrently herewith as Appendices F and L, respectively.

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2. Foreign Counterparts to the '826 Patent

62. Pursuant to Commission Rule 210.12(a)(9)(v), Exhibit 18 identifies the foreign patents or patent applications corresponding to the '826 Patent that have been issued, abandoned, rejected, or remain pending.

3. Non-Technical Description of the '826 Patent¹¹

63. The '826 Patent generally relates to a system that enables the user of a wireless device, such as a smartphone, to control when the Global Positioning System (GPS) of the smartphone is able to send location data over the wireless network. For example, the user may turn off the GPS system during normal use, in order to conserve battery power and protect a user's privacy. But, even when the GPS system is disabled by the user, the invention of the '826 patent provides a way to automatically enable the GPS system when an emergency call (e.g., "911") is placed, thereby enabling the GPS system to provide emergency personnel with the specific location of the caller.

4. Prior Litigation Involving the '826 Patent

64. The '826 Patent has not been the subject of previous litigation in any domestic court or agency. In addition, there has been no foreign court or agency litigation involving the '826 Patent or any of its counterparts.

65. The '826 Patent, however, is the subject of a complaint filed concurrently herewith by Mobility against Apple in the United States District Court for the Northern District of Illinois that alleges infringement of, among others, the '826 Patent.

¹¹ The non-technical descriptions of the inventions claimed in the Asserted Patents as set forth in this Complaint are not intended to construe either the specification or the claims of the Asserted Patents.

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V. UNLAWFUL AND UNFAIR ACTS OF RESPONDENT – PATENT INFRINGEMENT

66. Respondent unlawfully sells for importation, imports, and/or sells within the United States after importation the Accused Products, thereby infringing claim 12 of the '333 Patent; claim 1 of the '862 Patent; claims 1-4 of the '697 Patent, claims 1 and 17 of the '317 Patent, claim 1 of the '223 Patent, and claim 1 of the '826 Patent (collectively the "Asserted Claims").

67. Respondent has directly infringed and continues to directly infringe at least the Asserted Claims of the Asserted Patents by, *inter alia*, its importation, sale for importation, and/or its sale in the United States after importation of the Accused Products. Respondent also directly infringes the Asserted Claims of the Asserted Patents by having its employees or agents operate, test, and/or demonstrate the Accused Products in the United States, and through those activities infringes the Asserted Claims of the Asserted Patents.

68. Respondent indirectly infringes at least the Asserted Claims of the Asserted Patents by inducing and/or contributing to infringement of the Asserted Patents. For example, Respondent induces infringement and/or contributorily infringes when consumers and/or Respondent's employees operate the Accused Products in the United States.

69. Upon information and belief, Respondent induces infringement because: (i) Respondent has knowledge of the Asserted Patents through, at a minimum, discussions with Motorola; (ii) Respondent intends to induce direct infringement of the Asserted Patents; (iii) Respondent actively induces direct infringement by knowingly aiding and abetting that infringement; and/or (iv) Respondent has actual or constructive knowledge that its actions would induce infringement. For example, Respondent induces infringement by, among other things, providing and selling the Accused Products, creating and distributing user manuals and

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marketing materials, and by other acts and communications that instruct users how to operate the Accused Products and otherwise cause others to use the Accused Products, and thereby practice the claimed inventions of the Asserted Patents.

70. Upon information and belief, Respondent further contributes to infringement because there is a lack of substantial non-infringing uses for the Accused Products. Upon information and belief, Respondent knows the Accused Products are especially made or especially adapted for use in the infringement of the Asserted Patents and that the infringing portions of these products are not staple articles or commodities of commerce suitable for substantial non-infringing use.

71. The Accused Products that infringe the '333 Patent include at least the iPhone 3G, the iPhone 3GS, the iPhone 4, iPad 3G, Apple App Store. Exhibit 19 is a claim chart that compares representative asserted independent claim 12 of the '333 Patent to these Accused Products. Documents referenced in this claim chart are attached as Exhibits 25, 29, and 30.

72. The Accused Products that infringe the '862 Patent include at least the iPhone 3G, the iPhone 3GS and the iPhone 4. Exhibit 20 is a claim chart that compares representative asserted independent claim 1 of the '862 Patent to these Accused Products. Documents referenced in this claim chart are attached as Exhibits 25, 26, and 27.

73. The Accused Products that infringe the '697 Patent include at least the iPhone 3G, the iPhone 3GS, the iPhone 4 and the iPad 3G. Exhibit 21 is a claim chart that compares representative asserted independent claim 1 of the '697 Patent to these Accused Products. This chart relies primarily on portions of the WCDMA standard, with which the devices listed above are compliant. Documents referenced in this claim chart are attached as Exhibits 31, 32, 33, and 34.

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74. The Accused Products that infringe the '317 Patent include at least the iPod Touch 4, iPad, iPad 3G, iPhone 3G S, iPhone 3G, and iPhone 4. Exhibit 22 is a claim chart that compares representative asserted independent claims 1 and 17 of the '317 Patent to these Accused Products. Documents referenced in this claim chart are attached as Exhibit 30.

75. The Accused Products that infringe the '223 Patent include at least the iPhone 4, iPad, iPad with 3G, iPod Touch 4, AppleTV, MacBook, MacBook Pro, MacBook Air, iMac, Mac mini, and Mac Pro. Exhibit 23 is a claim chart that compares representative asserted independent claim 1 of the '223 Patent to these Accused Products. Documents referenced in this claim chart are attached as Exhibits 31, 36, and 37.

76. The Accused Products that infringe the '826 Patent include at least the iPhone 3G, the iPhone 3GS, and the iPhone 4. Exhibit 24 is a claim chart that compares representative asserted independent claim 1 of the '826 Patent to these Accused Products. Documents referenced in this claim chart are attached as Exhibits 25, 28, and 29.

VI. SPECIFIC INSTANCES OF UNFAIR IMPORTATION AND SALE

77. Significant portions of Respondent's products, including Respondent's Accused Products, are manufactured outside the United States, primarily in Asia (*see* Exh. 48 (Apple 2009 Annual Report at 10)), and sold within the United States. Thus, as of the filing of this Complaint, the Accused Products are being imported into the United States, sold for importation into the United States, and/or being sold within the United States after importation by Respondent.

78. The specific instances of importation of infringing Accused Products set forth below are representative examples of Respondent's unlawful importation, sale for importation, and/or sales within the United States after importation of infringing products.

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79. Several of the Accused Products, including the iPhone 4, iPad 3G, Mac Pro, and iPod Touch, were purchased in the United States, either in stores or over the Internet.¹²

80. The purchase receipts of a representative iPhone 4, iPad 3G, Mac Pro, and iPod Touch are attached as Exhibits to the Declaration of Andrew Curran ("Curran Decl."), which is attached as Exhibit 46.

81. The iPhone 4 is manufactured in China. *See* Curran Decl. ¶ 7. The photographed iPhone 4, in its packaging, is submitted as an Exhibit to the Curran Decl., and is representative of the other accused wireless communication devices.

82. The iPad 3G and Mac Pro are manufactured in China. *See* Curran Decl. ¶ 7. The photographed iPad 3G and Mac Pro in their packaging, are submitted as Exhibits to the Curran Decl., and are representative of the other accused computers.

83. The iPod Touch is manufactured in China. *See* Curran Decl. ¶ 7. The photographed iPod Touch, in its packaging, is submitted as an Exhibit to the Curran Decl., and is representative of the other accused portable music and data processing devices.

VII. CLASSIFICATION OF THE INFRINGING PRODUCTS UNDER THE HARMONIZED TARIFF SCHEDULE

84. Upon information and belief, the infringing Accused Products of Respondent may be classified under at least the following heading and subheading of the Harmonized Tariff Schedule of the United States ("HTSUS"): 8517.11.0000; 8517.12.0050, and 8443.31.0000, *et seq.* The exact 10-digit HTSUS Codes (headings/subheadings and suffixes) are dependent upon the specific capabilities and features of the products.

¹² At the request of the Commission, Complainant will provide physical samples of the Accused Products.

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85. These classifications are exemplary in nature and are not intended to restrict the scope of any exclusion order or other remedy ordered by the Commission.

VIII. THE DOMESTIC INDUSTRY RELATING TO THE ASSERTED PATENTS

A. Overview

86. A domestic industry for the purposes of 19 U.S.C. § 1337(a)(2), as defined in 19 U.S.C. § 1337(a)(3)(A), (B) and (C), exists or is in the process of being established with respect to Complainant's and Motorola's significant investment in plant and equipment, significant employment of labor and capital, and substantial investment in exploitation, including engineering, research and development, and licensing of the Asserted Patents and articles protected by the Asserted Patents.

87. The domestic industry affected by Respondent's unfair acts and unfair methods of competition includes the investments, activities, facilities, employees, third-party contractors and other resources of Complainant and Motorola devoted to the research and development, improvement, product technical support and service, quality assurance, reliability testing and inspection, customer service, distribution, warranty, and licensing efforts, with respect to the Asserted Patents and articles protected by the Asserted Patents.

B. Significant Investment in Plant and Equipment, Significant Employment of Labor and Capital, and Substantial Investment in Exploitation, Including Engineering, Research and Development, and Licensing of the Asserted Patents and Articles Protected by the Asserted Patents

1. Economic Prong

88. MDS employs [] individuals in several facilities throughout the United States. *See* Conf. Exh. D. These facilities comprise approximately [] square feet of offices, warehouses and work spaces. *See* Conf. Exh. E. The activities of MDS employees located in these facilities include engineering and science, marketing and sales,

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project management, business operations and planning, administrative services, quality assurance, reliability testing and inspection, product support, information technology, supply chain, customer service, material and distribution, and other functions related to, among others, the Asserted Patents and articles protected by the Asserted Patents. *See* Conf. Exh. D.

89. [

] *See* Conf. Exh. E.

90. Complainant's and Motorola's total investment in recent years in personnel, plant and equipment represented by their domestic MDS facilities is substantial. *See* Conf. Exh. D.

91. Through their engineering, research and development, marketing, licensing, and service activities, Complainant and Motorola have invested billions of dollars in their MDS technology, including the technology covered by the Asserted Patents. [

] Indeed, a significant portion of Complainant's and Motorola's expenditures can be attributed to their research and development efforts in the United States. Confidential Exhibit D sets out the domestic MDS employment breakdown in this category.

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92. For example, Complainant's and Motorola's [] facilities are primarily responsible for researching and developing mobile devices in the U.S. market. Across their facilities, Complainant and Motorola have integrated their engineering and science operations (*e.g.*, mechanical, electrical, electronics science; system, production, hardware, and software engineering; package and IC design), technical support operations (*e.g.*, field and software engineering; material and process laboratories; quality reliability and assurance support), warranty and service operations, parts support operations, inspection and customer service operations. Complainant employs and Motorola has employed, both directly and through contracting with third parties, scientific, technical, administrative and support personnel in research, product development and engineering related to the Asserted Patents and articles protected by the Asserted Patents. *See* Conf. Exh. D.

93. Complainant's and Motorola's domestic investments in researching and developing mobile devices also resulted in the inventions claimed in the Asserted Patents. In this regard, the inventors of each of the Asserted Patents were employees of Motorola, undertaking research and development activities out of domestic, state-of-the-art Motorola facilities.

94. In addition to their research and product development activities, Complainant and Motorola provide significant engineering support services and after-market customer support services. For example, as a part of their research and development investment, Complainant and Motorola have employed, and presently employ, approximately [] individuals in their U.S. facilities specifically for quality assurance and inspection of their mobile devices, including articles protected by the Asserted Patents. *See* Conf. Exh. D. The responsibilities of individuals involved in quality assurance include, but are not limited to,

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predicting field failure rates, reviewing factory quality metrics, monitoring field quality, participating in solutions findings, tracking software defects, reviewing prototype certification compliance, and comparing battery life performance to specification. Aesthetic suitability of samples is also part of the inspection and partly reviewed by quality and management teams from Complainant's and Motorola's distribution center in the United States.

95. To further ensure quality and performance of Complainant's and Motorola's devices, including articles protected by the Asserted Patents, Complainant's and Motorola's employees also have performed, and perform, a variety of tests in the United States. Examples of these tests include assessments of reliability, performance, compatibility, perceived quality, safety and field performance. Components, subsystems, complete products, and accessories are all tested individually and in combination. Finally, packaging activities for U.S. shipments are carried out at a distribution center in Texas on behalf of Complainant and Motorola by a third party contractor.

96. MDS's service organizations authorize certain outside companies or third parties to service MDS products, including articles protected by the Asserted Patents. In order to ensure adequate support is given to its customers, MDS provides technical training for the technicians employed by these authorized service centers in the United States. MDS also provides warranty repair work for Motorola devices, including articles protected by the Asserted Patents. There is a toll-free customer service number in the United States: 800-331-6456. Technical assistance is provided both by MDS employees and by third-party contractors located, among other places, in Florida and Illinois. *See* Exh. 49 (Motorola's standard limited warranty); Exh. 35 (Droid 2 support and warranty information).

♦PUBLIC VERSION♦

97. Finally, Complainant and Motorola have substantial investments in the sale and distribution of articles protected by the Asserted Patents. Motorola's U.S. sales of just the articles protected by the Asserted Patents totaled [] in 2009, which account for approximately [] of total MDS sales in the United States over the same periods. See Conf. Exh. F.

98. Complainant and Motorola also have substantial investments in the exploitation of the Asserted Patents through their extensive domestic licensing program. This program is responsible for the licensing of each of the Asserted Patents. Complainant and Motorola invest heavily in the exploitation of their technologies and patents, including the Asserted Patents, through their extensive licensing activities.

99. Complainant's and Motorola's Intellectual Property Licensing Department presently employs [] individuals within the United States primarily in their [

] facility. These employees are dedicated to the evaluation of Complainant's and Motorola's patent portfolio, the identification of potential licensees, the assertion of Complainant's and Motorola's patents, the negotiation of patent licenses, and the monitoring of compliance with the terms of those licenses. They also perform important licensing-related functions, including patent enforcement, patent management, legal analysis, technical analysis, business planning, and various administrative tasks. All of these employees contribute to the licensing of Complainant's and Motorola's technology, including the Asserted Patents. Confidential Exhibit B sets forth details regarding the significant expenditures Complainant and Motorola incur related to their licensing activities.

100. Complainant's and Motorola's licensing activities have produced licenses to many patents, including the Asserted Patents, to numerous major cellular phone manufacturers.

♦PUBLIC VERSION♦

Pursuant to Commission Rule 210.12(a)(9)(iii), a list of entities licensed under each of the Asserted Patents is attached as Confidential Exhibit A. Pursuant to Commission Rule 210.12(a)(9)(iv), copies of the relevant licenses are attached as Confidential Exhibits G-NN, and PP. Confidential Exhibit B sets forth royalty revenue Motorola has generated from its licenses that include the Asserted Patents.

2. Technical Prong

101. For those domestic activities discussed above which relate to articles protected by the Asserted Patents, Complainant and Motorola domestically design and develop wireless handheld devices, wireless communication devices and communication system components that integrate both cellular telephone and data communication functionality and practice the technology covered by certain of the Asserted Patents. These representative domestic industry devices, which Mobility currently manufactures abroad, include, but are not limited to, the Motorola CLIQ, CLIQ XT, the Motorola Droid, Droid 2, and Droid X.¹³

102. Exhibit 51 is a claim chart demonstrating that each and every limitation of exemplary claim 12 of the '333 Patent is met by a Representative Domestic Industry Product, the CLIQ XT. Documents referenced in this claim chart are attached as Exhibit 43.

103. Exhibit 52 is a claim chart demonstrating that each and every limitation of exemplary claim 1 of the '862 Patent is met by a Representative Domestic Industry Product, the Droid 2. Documents referenced in this claim chart are attached as Exhibits 35, 38, 39, and 40.

104. Exhibit 53 is a claim chart demonstrating that each and every limitation of exemplary claim 1 of the '697 Patent is met by a Representative Domestic Industry Product, the CLIQ XT. Documents referenced in this claim chart are attached as Exhibits 43 and 34.

¹³ At the request of the Commission, Complainant will provide physical samples of the Motorola CLIQ, CLIQ XT, the Motorola Droid, Droid 2, and/or Droid X.

♦PUBLIC VERSION♦

105. Exhibit 41 is a claim chart demonstrating that each and every limitation of exemplary claims 1 and 17 of the '317 Patent is met by a Representative Domestic Industry Product, the Droid 2. Documents referenced in this claim chart are attached as Exhibits 30, 35, and 38.

106. Exhibit 42 is a claim chart demonstrating that each and every limitation of exemplary claim 1 of the '223 Patent is met by a Representative Domestic Industry Product, the Droid 2. Documents referenced in this claim chart are attached as Exhibits 37, 38, and 44.

107. Exhibit 50 is a claim chart demonstrating that each and every limitation of exemplary claim 1 of the '826 Patent is met by a Representative Domestic Industry Product, the Droid 2. Documents referenced in this claim chart are attached as Exhibits 35 and 45.

C. A Domestic Industry Exists

108. All of the domestic investments and activities of Complainant and Motorola, their employees, contractors, and inventors, constitute a domestic industry devoted to the Asserted Patents and articles protected by the Asserted Patents.

IX. RELIEF REQUESTED

109. Complainant respectfully requests that the Commission:

(a) Institute an immediate investigation pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, with respect to Respondent's violations of that section arising from the importation into the United States, sale for importation, and/or the sale within the United States after importation of wireless communications devices, portable music and data processing devices, computers, and components thereof that infringe one or more claims of United States Patent Nos. 6,272,333; 6,246,862; 6,246,697, 5,359,317, 5,636,223, and 7,751,826;

(b) Set a target date of no more than 15 months;

♦PUBLIC VERSION♦

(c) Schedule and conduct a hearing pursuant to Section 337(c) for the purposes of (i) receiving evidence and hearing argument concerning whether there has been a violation of Section 337, and (ii) following the hearing, determining that there has been a violation of Section 337;

(d) Issue a permanent exclusion order directed to products manufactured by Respondent, its subsidiaries, related companies and agents pursuant to 19 U.S.C. § 1337(d) excluding entry into the United States of wireless communications devices, portable music and data processing devices, computers, and components thereof that infringe one or more claims of United States Patent Nos. 6,272,333; 6,246,862; 6,246,697, 5,359,317, 5,636,223, and 7,751,826;

(e) Issue a permanent cease and desist order pursuant to 19 U.S.C. § 1337(f) prohibiting Respondent, its subsidiaries, related companies and agents from engaging in the importation, sale for importation, marketing and/or advertising, distribution, offering for sale, sale, sale after importation, or other transfer within the United States of wireless communications devices, portable music and data processing devices, computers, and components thereof that infringe one or more claims of United States Patent Nos. 6,272,333; 6,246,862; 6,246,697, 5,359,317, 5,636,223, and 7,751,826;


(f) Impose a bond upon importation of infringing wireless communication devices, portable music and data processing devices, computers, and components thereof during the 60-day Presidential review period pursuant to 19 U.S.C. § 1337(j); and

(g) Issue such other and further relief as the Commission deems just and proper under the law, based on the facts determined by the Investigation and the authority of the Commission.

♦PUBLIC VERSION♦

DATED: October 14, 2010

Respectfully submitted

By 

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Attorneys for Complainant Motorola Mobility,
Inc.

• PUBLIC VERSION •

VERIFICATION

I, Kirk Dailey, am Corporate Vice President, Intellectual Property at Motorola Mobility, Inc. and am duly authorized to execute this verification on behalf of Motorola Mobility, Inc. I have read its Complaint and am aware of its contents. To the best of my knowledge, information and belief, based upon an inquiry reasonable under the circumstances, I hereby certify as follows:

1. The Complaint is not being presented for any improper purpose, such as to harass or to cause unnecessary delay or needless increase in the cost of the investigation or related proceeding.
2. The claims and other legal contentions in the Complaint are warranted by existing law or by a nonfrivolous argument for the extension, modification, or reversal of existing law or the establishment of new law; and
3. The allegations and other factual contentions in the Complaint have evidentiary support or, if specifically so identified, are likely to have evidentiary support after a reasonable opportunity for further investigation or discovery.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed this 28th day of September, 2010 in Libertyville, Illinois.



Kirk Dailey
Corporate Vice President
Intellectual Property

02426.51679/3675909.9

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN**

APPLE INC.,

Plaintiff,

v.

MOTOROLA MOBILITY, INC.

Defendant.

Case No. 11-cv-178-BBC

MOTOROLA MOBILITY, INC.'S MOTION TO DISMISS

Defendant Motorola Mobility, Inc. (“Motorola”) hereby files this Motion to Dismiss for lack of personal jurisdiction and failure to state a claim pursuant to Federal Rules of Civil Procedure 12(b)(2) and 12(b)(6). This Motion should be granted for the reasons set forth in the accompanying Memorandum of Points and Authorities.

Plaintiff Apple, Inc. (“Apple”) has failed to establish that there is judicial controversy ripe for adjudication. All of Apple’s claims arise out of, or respond to, the patent infringement claims that Motorola has asserted against Apple in the ITC and other district court actions, which Apple vigorously disputes. The counterclaims focus on whether Motorola is contractually obligated to license its essential patents to Apple on F/RAND terms. The F/RAND determination cannot be made, however, until after it has been determined that Apple is not able to practice a standard without infringing on Motorola’s patents. Accordingly, there is not yet a “real, substantial controversy,” and this Court lacks subject matter jurisdiction over Apple’s claims.

A1792 - 1798

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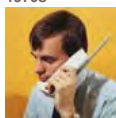
A1811

TIMELINE

Since 1928, Motorola has been committed to innovation in communications and electronics. Our company has achieved many milestones in its 80-plus year history. We made the equipment that carried the first words from the moon in 1969. We led the communications revolution with the first commercial handheld cellular phone in 1983 and the first all-digital high-definition television (HDTV) technical standard in 1990. Today, our excellence in innovation continues to shape the future of the Motorola brand. See Motorola history highlights below, or [download the detailed overview](#): (20 page PDF; 1.06 MB)

1920 1930 1940 1950 1960 1970 1980 1990 2000 2010

1970s



1973: Prototype DynaTAC Portable Cellular System

In 1973 Motorola demonstrated a prototype design for the DynaTAC (Dynamic Adaptive Total Area Coverage) portable radiotelephone, using cellular radio technology.

1980s



1983: World's First Commercial Portable Cellular Phone

The world's first commercial handheld cellular phone, the Motorola DynaTAC phone, received approval from the U.S. Federal Communications Commission on September 21, 1983. The 28-ounce (794-gram) phone became available to consumers in 1984.



1983: First Hands-Free Cellular Phone Operation

In September 1983, Motorola introduced the VSP Vehicular Speaker Phone, the first hands-free cellular phone product for a car. The VSP technology was incorporated in Motorola's DynaTAC mobile (installed in the car) cellular phone.



1986: Six Sigma Quality Process

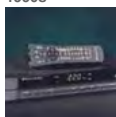
Motorola invented the Six Sigma quality improvement process in 1986. Six Sigma provided a common worldwide language for measuring quality and became a global standard.



1989: MicroTAC Personal Cellular Telephone

In April 1989 Motorola launched the MicroTAC personal cellular telephone, then the smallest and lightest model on the market.

1990s



1990: World's First Digital HDTV Technical Standard

In 1990 a Motorola business — then known as General Instrument Corporation — proposed the world's first all-digital HDTV (high-definition television) technical standard. General Instrument's DigiCipher System could be transmitted over a single VHF or UHF channel, cable or satellite.



1991: World's First GSM Cellular System Motorola demonstrated the world's first GSM (Global System for Mobile Communications) working-prototype cellular system and phones in Hanover, Germany, in 1991.



1994: iDEN Digital Radio

In 1994 Motorola introduced iDEN digital radio, the world's first commercial digital radio system that combined voice dispatch, cellular, paging and data communications in a single radio network and handset.



1995: World's First Two-Way Pager

In 1995 Motorola introduced the world's first two-way pager, the Tango two-way personal messaging pager. It allowed users to receive text messages and e-mail, and reply with a standard response. It also could be connected to a computer to download long messages.



1996: StarTAC Wearable Phone

A1812

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When introduced in 1996, Motorola's StarTAC wearable cellular telephone was the world's smallest and lightest. It weighed just 3.1 ounces (88 grams).

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1999: Timeport World Phone

The 1999 Motorola Timeport L7089 phone operated on all three GSM (Global System for Mobile communications) digital radio bands.

People could use the same Timeport phone when travelling to Europe, the Middle East, Africa, Asia and the Americas.

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1999: iDEN i1000plus Handset

Introduced in 1999, Motorola's iDEN i1000plus handset was the world's first to combine a digital phone, two-way radio, alphanumeric pager, Internet microbrowser, e-mail, fax and two-way messaging.

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2000



2000: World's First GPRS Cellular System

In June 2000, Motorola and Cisco Systems, Inc. supplied the world's first commercial GPRS (General Packet Radio Service) cellular network to BT Cellnet in the United Kingdom. The system also used the world's first GPRS cellular phone, the Motorola Timeport P7389i model.



2000: General Instrument Merger

Motorola and General Instrument Corporation merged in 2000 to provide integrated video, voice and data networking for cable, Internet and high-speed data services.



2000: Accompli Chinese Wireless Internet Phone

The 2000 Motorola Accompli A6188 phone used a touch-screen display with Chinese handwriting recognition technology. It included an electronic organizer, an English/Chinese dictionary and Internet access capability.



2002: World's First Wireless Cable Modem Gateway

In 2002 Motorola's SURFboardAE SBG1000 cable modem gateway was the world's first to combine a high-speed cable modem router with an ethernet switch and wireless home gateway. It enabled cable TV subscribers to use their cable connection to share Internet access and to network multiple computers wirelessly.



2004: MOTORAZR V3 Cellular Phone

In 2004 Motorola introduced the RAZR V3 cellular phone, an ultraslim, metal-clad, quad-band flip phone. The 13.9 mm thin phone used aircraft-grade aluminum to achieve several design and engineering innovations, including a nickel-plated keypad.



2004: Push-To-Talk Over Cellular

In 2004 Motorola introduced its unique cross-technology Push-To-Talk over Cellular (PoC) product line that gave subscribers connectivity among GPRS, CDMA2000 1X and WiFi networks.



2006: Motorola MING Smart Phone

Motorola introduced the MING touch screen smart phone in Asia in 2006. It used advanced handwriting software to recognize more than 10,000 handwritten characters of the Chinese alphabet.



2008: Sanjay K. Jha, Co-CEO and CEO

On August 4, 2008, Dr. Sanjay K. Jha became co-chief executive officer of Motorola and chief executive officer of Motorola's Mobile Devices business.

2010

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A1815

Making History: Developing the Portable Cellular System

In the communications world, the Motorola brand brings to mind innovation. Years of experience engineering portable two-way radio systems led to Motorola's vision of personal, portable communications. The result was the world's first commercial portable cellular phone in 1983. Motorola's DynaTAC 8000X phone and the cellular system behind it changed how the world communicates.

Building the foundation

Motorola's success in cellular had its roots in the company's earlier research. Born as the Galvin Manufacturing Corporation in Chicago in 1928, the company was a radio communications pioneer. The company produced its first Motorola-branded car radio in 1930, followed soon after by radios for public safety officers. In 1940 Motorola developed its first handheld radio, the Handie-Talkie™ portable two-way radio, designed for the U.S. military. More two-way radios for public safety and businesses, and entertainment radios for consumers -- many of them portable -- were among the products the company made during the 1940s through the 1960s. Motorola had a mobility mindset dedicated to making communications available where and how people needed them.



Motorola Improved Mobile Telephone Service (IMTS) car telephone, 1964.

Welcoming cellular technology

The car radiotelephone industry provided a new opportunity for Motorola to help people communicate. Beginning in 1946 when radiotelephone service began in the U.S., the company produced mobile telephones in cars or "car phones," as they came to be called. Radiotelephones essentially were two-way radios connected to the landline telephone system.

However, problems with car radiotelephone systems emerged as their popularity grew. Due to the limited number of available frequencies, car phone systems allowed only a few calls at one time. Frustrated callers often experienced long waits. In addition, radio channels could not be reused in nearby areas because of interference from the high-powered base stations.

In 1968, the U.S. Federal Communications Commission (FCC) proposed to allocate frequencies in the 800-900 MHz range for a new technology to solve these problems. Cellular technology, conceptualized by Bell Laboratories (AT&T) years earlier, was a possible solution. Geographical areas would be broken into small adjacent cells and many more car phones could be used at one time. A network of cell sites would be supported by a call-switching infrastructure that tracked users as they moved through the network and automatically switched their calls as their location changed. By the early 1970s, AT&T and Motorola both announced plans for high-capacity mobile telephone systems based on cellular technology.

Motorola's portable cellular concept

While AT&T developed a system based on mobile (car) phones, Motorola decided to apply its decades of radio expertise and compete with AT&T for access to the proposed new radio frequencies.

When Motorola engineers began researching cellular technology, they soon recognized its potential. But their vision went far beyond car-based phone technology. "When you park your car and leave, you can't use your mobile [car phone] but you can take your portable with you," stated Martin Cooper, who was one of the leaders in early cellular development at Motorola. The company's idea was a big one: It would involve not only creating a portable wireless phone, but also building the system and infrastructure to support it. The Motorola team would have to prove to the FCC that a cellular system compatible with portable phones would work. They did not have much time.



Man using Motorola DynaTAC portable cellular telephone prototype, 1973.

Creating the first wireless portable cell phone in the world was an enormous challenge. No one had ever seen one before, so there was nothing to compare it to. Cooper called on Motorola's industrial design director, Rudy Krolopp, and his team to design the shape of the phone. A three-dimensional model needed to be built within days in order to have a working prototype for the FCC meeting in six weeks.

After several days of continual work, Krolopp's team gathered for dinner at a nearby restaurant to present their concepts. Hours later, they

emerged with a winning design. "We called it a shoe phone, because it sort of looked a little bit like a boot," recalled Krolopp.

The design and engineering teams began to work together at a fast pace to meet the impending deadline. The engineers' challenge now was to make the electronics small enough to fit in the handset that Krolopp's team designed. Fortunately, because of Motorola's two-way radio and

CELLULAR INNOVATIONS

1930s

Motorola began developing two-way radio communications equipment.

1960s

Motorola was a major supplier of pre-cellular car telephones.

February 1973

Motorola had succeeded in producing the first working DynaTAC portable phone prototype.

September 21, 1983

After 10 years and a more than US\$100 million investment, Motorola succeeds in creating the world's first commercial portable cellular phone, the DynaTAC 8000x

FUN FACTS ABOUT FIRST CELLULAR PHONE

- The DynaTAC weighed 2 1/2 pounds, contained 30 circuit boards and was 9 inches tall
- You could talk no more than 30 minutes.
- It took 10 hours to recharge.
- It cost \$3,995 at the time, which is equivalent to \$8724 today.

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semiconductors, the company already held patents on, and have developed much of the basic electronics needed for a portable phone system.

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USA change location

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By February of 1973, Motorola had produced a working DynaTAC (DYNamic Adaptive Total Area Coverage) portable phone prototype. They presented the DynaTAC prototype phone and system concept to the FCC, which soon announced that it would hold new hearings on a nationwide portable cellular service. It was an incredible achievement for the Motorola team. But they now faced another challenge: designing a commercial large area system that would enable their portable phone to operate.

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Designing a portable system

The DynaTAC cellular system required phone calls to be switched from cell to cell as users traveled. Making that happen without a high rate of dropped calls required innovative engineering. And foremost, Motorola had to create a high capacity system that worked with both portable phones and mobile car phones.

The Motorola engineering team's concept involved designing a large number of overlapping cells in a geographic area. Low powered transmitters in each cell allowed frequencies to be reused in cells farther away. Computerized network equipment tracked the moving caller through the system and automatically switched the call to a new cell and frequency as the caller changed locations (a process known as "hand-off"). The system automatically adjusted the phone's transmitting power so it would not interfere with neighboring cell sites and linked the call with the wireline telephone network. Specialized directional antennas focused the radio signal where it was needed. As more people subscribed to cellular services, the system could be expanded by splitting cells and making many smaller cells within the same geographic area. Because the radio channels used a narrower bandwidth than the older car radiotelephone system, hundreds more available channels meant more people could share the same radio spectrum.



Motorola DynaTAC 8000X portable cellular phone, 1984.

To test their concept Motorola engineers spent many hours in Chicago, New York City and Washington, D.C., deploying experimental equipment, taking measurements and testing radio signals. The prototype system now was ready for a market trial with paying subscribers. When the F.C.C. granted a developmental license for the Baltimore-Washington, D.C., area in 1977, Motorola supplied DynaTAC cellular equipment. One user summarized the new experience, "My business calls are automatically forwarded to my DynaTAC portable and I'm always in touch!"

The DynaTAC cellular radiophone system's unique features created a complete system tailored to the needs of both car and portable phones. While Motorola worked with U.S. government agencies to receive regulatory approval, the team continued to test and refine the technology. Meanwhile, the cellular concept was spreading through other parts of the world. Motorola began supplying systems and phones to other countries.

Achieving A World First On September 21, 1983, Motorola made history when the FCC approved the DynaTAC 8000X phone, the world's first commercial portable cell phone. After more than 10 years and a US\$100 million investment, Motorola's commitment produced an innovative portable technology that revolutionized the communications industry and changed the lives of people around the world.

MULTIMEDIA

Motorola's Cellular Revolution



A1817

A1823 - 1870

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iPhone images

iPhone Premieres This Friday Night at Apple Retail Stores

Free Workshops, Genius Bar Support and One to One Personal Training

CUPERTINO, California—June 28, 2007—Apple's revolutionary iPhone™ will go on sale this Friday, June 29 at 6:00 p.m. local time at Apple® retail stores nationwide. All 164 Apple retail stores in the US will stay open until midnight, and customers can purchase up to two iPhones on a first come, first served basis. Beginning Saturday morning, iPhone customers can learn how to get the most out of the iPhone with free, in-depth workshops offered throughout the day at all Apple retail stores. Every Apple retail store will offer support for iPhone at the Genius Bar and personal training through Apple's new One to One program.

"Apple retail stores were created for this moment—to let customers touch and experience a revolutionary new product," said Ron Johnson, Apple's senior vice president of Retail. "With our legendary Genius Bar support, free workshops and our One to One personal training, we're here to help customers get the most from their new iPhone."

iPhone introduces an entirely new user interface based on a revolutionary multi-touch display and pioneering new software that allows users to control iPhone with just a tap, flick or pinch of their fingers. iPhone combines three products into one small and lightweight handheld device—a revolutionary mobile phone, a widescreen iPod®, and the Internet in your pocket with best-ever applications on a mobile phone for email, web browsing and maps. iPhone ushers in an era of software power and sophistication never before seen in a mobile device, which completely redefines what users can do on their mobile phones.

Pricing and Availability

iPhone goes on sale in the US on June 29, 2007 at 6:00 p.m. local time through Apple's retail stores and AT&T's select retail stores. Apple's online store will be taking orders for iPhone beginning at 6:00 p.m. PDT. iPhone will be available in a 4GB model for \$499 (US) and an 8GB model for \$599 (US), and will work with either a PC or Mac®. Beginning June 30 and continuing through the summer, Apple Stores in the US will open early at 9:00 a.m. for iPhone sales. Customers can check iPhone availability at their local Apple retail store starting at 9:00 p.m. the night before at www.apple.com/retail.

Apple ignited the personal computer revolution in the 1970s with the Apple II and reinvented the personal computer in the 1980s with the Macintosh. Today, Apple continues to lead the industry in innovation with its award-winning computers, OS X operating system and iLife and professional applications. Apple is also spearheading the digital media revolution with its iPod portable music and video players and iTunes online store, and will enter the mobile phone market this year with its revolutionary iPhone.

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NOTE TO EDITORS: For additional information visit Apple's [PR website](http://www.apple.com/pr), or call Apple's Media Helpline at (408) 974-2042.

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A1886

Apple Sues HTC for Patent Infringement

CUPERTINO, California—March 2, 2010—Apple® today filed a lawsuit against HTC for infringing on 20 Apple patents related to the iPhone's user interface, underlying architecture and hardware. The lawsuit was filed concurrently with the U.S. International Trade Commission (ITC) and in U.S. District Court in Delaware.

"We can sit by and watch competitors steal our patented inventions, or we can do something about it. We've decided to do something about it," said Steve Jobs, Apple's CEO. "We think competition is healthy, but competitors should create their own original technology, not steal ours."

Apple reinvented the mobile phone in 2007 with its revolutionary iPhone®, and did it again in 2008 with its pioneering App Store, which now offers more than 150,000 mobile applications in over 90 countries. Over 40 million iPhones have been sold worldwide.

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NOTE TO EDITORS: For additional information visit Apple's **PR website**, or call Apple's Media Helpline at (408) 974-2042.

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Royalty Rates For Telecommunications

Royalty Rates And Licensing Strategies For Essential Patents On LTE (4G) Telecommunication Standards

By Eric Stasik

Long Term Evolution, or LTE, is the latest sequel to the successful GSM series of standards. A so-called fourth generation (4G) mobile communications technology, LTE is an upgrade to UMTS/W-CDMA (3G) providing an enhanced radio interface and all-IP networking technology.¹

Like a sequel to a successful movie, LTE includes many elements of the original release and offers a few new twists. This is especially true when it comes to the matter of licensing essential IPRs for the LTE standard. Audiences can expect to see the same licensing challenges that first appeared in GSM (2G) and which re-appeared in UMTS (3G) starring again in LTE (4G).² The plot is essentially the same: lots of essential patents and many different patent holders.

The LTE sequel begins in much the same way as UMTS did—with an announcement of an industry initiative on the matter of essential IPRs. In LTE this scene took place in April 2008 where a group of leading telecommunication companies committed themselves to a framework for “establishing predictable and more transparent maximum aggregate costs for licensing [patents] that relate to 3GPP Long Term Evolution and Service Architecture Evolution (LTE/SAE) standards.” In particular, these companies stated “support” for “a reasonable maximum aggregate royalty for LTE essential IPR in handsets is a single-digit percentage of the sales price.”³

This *ad hoc* licensing framework for LTE closely resembles an arrangement announced for UMTS/W-CDMA. In 2002, “industry leaders NTT DoCoMo, Ericsson, Nokia and Siemens and Japanese manufacturers” reached an understanding on an arrangement to “enable the cumulative royalty rate for W-CDMA to be at a modest single digit level.”⁴ A Nokia press release specified that “[u]nder this proposal no manufacturer should pay more than 5 percent royalties covering all essential WCDMA patents from all patent holders.”⁵

Estimates on the actual cumulative royalty paid for GSM and W-CDMA vary widely. In 1998, ITSUG (an obscure organisation representing some operators and manufacturers) filed a complaint with the European Commission claiming that “when GSM mobile handsets first appeared on the market place cumulative royalties amounted to as much as 35 percent to 40 percent of ex-works selling price.”⁶ In 2007, Lemley and Shapiro commented that they had “seen estimates [for W-CDMA] as high as 30 percent of the total price of each phone... based on summing royalty demands before any cross-licensing negotia-

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1. For an introduction to LTE refer to the paper published by 3GPP: *UTRA-UTRAN Long Term Evolution (LTE) and 3GPP System Architecture Evolution (SAE)* available at ftp://ftp.3gpp.org/Inbox/2008_web_files/LTA_Paper.pdf.

2. For a general discussion of GSM see, for example, Bekkers, Rudi, et al. (2002), *Intellectual Property Rights and Standardization: the case of GSM*, Telecommunications Policy 26 (2002), pp. 171-188. A more exhaustive discussion of GSM and W-CDMA may be found in Goldstein and Kearsey's most excellent book, *Technology Patent Licensing: An International Reference on 21st Century Patent Licensing, Patent Pools, and Patent Platforms*, Aspatore Books, ISBN 1-59622-004-X.

3. Ericsson Press Release, (April 14, 2008), *Wireless Industry Leaders commit to framework for LTE technology IPR licensing*, undersigned by Ericsson, Alcatel-Lucent, NEC Corporation, NextWave Wireless, Nokia, Nokia Siemens Networks, and Sony Ericsson. Available on Oct. 13, 2009 at URL: <http://www.ericsson.com/ericsson/press/releases/20080414-1209031.shtml>.

4. NTT DoCoMo Press Release (Sept. 1, 2002) *Industry leaders NTT DoCoMo, Ericsson, Nokia and Siemens, and Japanese Manufacturers reach a mutual understanding to support modest royalty rates for the W-CDMA technology worldwide*. Available on Oct. 16, 2009 at URL: <http://www.nttdocomo.com/pr/2002/000901.html>.

5. Nokia Press Release (May 08, 2002) *Nokia advocates industry-wide commitment to 5 percent cumulative IPR royalty for WCDMA*, Available on Oct. 21, 2009 at URL: http://press.nokia.com/PR/200205/858681_5.html.

6. International Telecommunications Standards User Group, *The GSM Standards, IPR and Licensing (An Example of the Restrictive Effects on Standardization)*, December 1998, page 6.

7. Lemley, Mark A. and Shapiro, Carl (2007) “*Patent Holdup and Royalty Stacking*”, *Texas Law Review*, vol. 85, p. 2026

Royalty Rates For Telecommunications

selling price.”¹⁸

Qualcomm “expects that it will charge royalties for a license under its standards essential LTE... patent portfolio...of approximately 3.25 percent of the wholesale selling price...”¹⁹

ZTE says it “will license its LTE essential patents for mobile communication terminals with a maximum 1 percent from the sales price of an end user device.”²⁰

These announced royalty rates are summarized in Table 1 along with information on the LTE IPR declarations available from ETSI. Other than the fact that you can actually find these royalty rates on the Web sites of above-mentioned companies, none of this is any surprise.

In fact, the announced royalty rates for LTE (4G) are exactly within the range Goldstein and Kearsey observed in 2004 for UMTS/W-CDMA (3G) technology where the authors commented that “[i]ndividual patent owners usually charge between 0.5 and 4 percent on essential patents.”²¹ The average of the announced royalty rates for LTE also lines up well with other observations. In his book *Intellectual Property Rights, External Effects, and Anti-Trust Law*, Ilkka Rahnasto noted in 2003 that “some commentators have estimated that royalty rates as high as 2 percent would be paid in the communications industry.”²² The average of the announced royalty rates for LTE is approx. 2.1 percent.

It is necessary at this point to clarify that an “announced” royalty rate may be significantly different than the “actual” royalty rate resulting from a bi-lateral negotiation. Having made a public announcement, a potential

Table 1. Summary of ETSI Declarations and Announced Royalty Rates for LTE

	Number of Declared Essential Patents	Published Handset Royalty Rate
Alcatel-Lucent	9	2,00%
Apple	-	
AT&T	1	
Ericsson	146	1,50%
ETRI	35	
France Telecom	3	
Freescale Semiconductor	1	
Gemplus	1	
Hewlett Packard	1	
Huawei	182	1,50%
Icera	1	
iCODING	1	
Infineon	2	
InterDigital Technology Corp	282	
InterDigital Patent Holdings	155	
IPR Licensing, Inc.	4	
LG Electronics	150	
Motorola	16	2,25%
NEC	19	
NextWave Wireless	-	
Nokia Corporation	142	1,50%
Nokia Siemens Networks	32	0,80%
Nortel Networks	46	1,00%
NTT DoCoMo	78	
Panasonic	39	
Qualcomm	350	3,25%
RIM	-	
Samsung	170	
Siemens	11	
Sony	12	
Sony-Ericsson	0	
Texas Instruments	26	
TDF	3	
T-Mobile Deutschland GmbH	12	
T-Mobile International AG	5	
Vodafone	-	
VoiceAge	6	
ZTE	-	1,00%
Totals	1941	14,80%

(SOURCE: ETSI 2010)

19. Qualcomm LTE/WiMax Patent Licensing Statement (December 2008).

20. ZTE Press Release, Dec. 22, 2008, *The Licensing Policy on LTE essential patents of ZTE*. Available on July 21, 2009 at URL: http://www.en.zte.com.cn/en/press_center/news/200810/t20081008_160196.html.

21. Kearsey, Brian and Goldstein, Larry M. 2004. *Technology Patent Licensing: An International Reference on 21st Century Patent Licensing, Patent Pools, and Patent Platforms*, Aspstore Books, page 53.

22. Rahnasto, Ilkka, 2003. *Intellectual Property Rights, External Effects, and Anti-Trust Law*, Oxford University Press, p. 175.

A2199 - 3296

REMOVED DUE TO CONFIDENTIAL MATERIAL

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN**

APPLE INC.,

Plaintiff,

v.

MOTOROLA MOBILITY, INC.

Defendant.

Case No. 11-CV-178 (BBC)

JURY TRIAL DEMANDED

JOINT MOTION TO MODIFY THE CASE SCHEDULE

Plaintiff Apple Inc. and Defendant Motorola Mobility, Inc. jointly request that the Court modify the upcoming deadlines in this case as follows.

- Disclosure of Experts: Proponents: Tuesday, March 6, 2012 (currently set for December 16, 2011)
- Disclosure of Experts: Respondents: Tuesday, April 3, 2012 (currently set for January 13, 2012)
- Deadline for filing dispositive motions: Friday, June 1, 2012 (currently set for February 21, 2012)
- Close of discovery: Tuesday, August 28, 2012 (currently set for March 10, 2012)

The Court set the trial in this matter for November 5, 2012; the parties do not seek to change that date. The parties jointly request that the Court modify the dates for disclosure of experts, filing dispositive motions, and the close of discovery as set forth above, to align these dates with the Court's usual case schedule and to allow sufficient time for investigation and discovery prior to trial.

A3530 - 4404

REMOVED DUE TO CONFIDENTIAL MATERIAL

Annex 6: ETSI Intellectual Property Rights Policy

1 Introduction

The General Assembly of ETSI has established the following Intellectual Property Rights POLICY.

2 Definitions

Terms in the POLICY which are written in capital letters shall have the meaning set forth in Clause 15 entitled DEFINITIONS.

3 Policy Objectives

- 3.1 STANDARDS shall be based on solutions which best meet the technical objectives of the European telecommunications sector, as defined by the General Assembly. In order to further this objective the ETSI IPR POLICY seeks to reduce the risk to ETSI, MEMBERS, and others applying ETSI STANDARDS, that investment in the preparation, adoption and application of STANDARDS could be wasted as a result of an ESSENTIAL IPR for a STANDARD being unavailable. In achieving this objective, the ETSI IPR POLICY seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs.
- 3.2 IPR holders whether members of ETSI and their AFFILIATES or third parties, should be adequately and fairly rewarded for the use of their IPRs in the implementation of STANDARDS.
- 3.3 ETSI shall take reasonable measures to ensure, as far as possible, that its activities which relate to the preparation, adoption and application of STANDARDS, enable STANDARDS to be available to potential users in accordance with the general principles of standardization.

4 Disclosure of IPRs

- 4.1 Each MEMBER shall use its reasonable endeavours to timely inform ETSI of ESSENTIAL IPRs it becomes aware of. In particular, a MEMBER submitting a technical proposal for a STANDARD shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted.
- 4.2 The obligations pursuant to Clause 4.1 above do however not imply any obligation on MEMBERS to conduct IPR searches.

5 Procedures for Committees

ETSI shall establish guidelines for the chairmen of COMMITTEES with respect to ESSENTIAL IPRs.

6 Availability of Licences

6.1 When an ESSENTIAL IPR relating to a particular STANDARD is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the owner to give within three months an undertaking in writing that it is prepared to grant irrevocable licences on fair, reasonable and non-discriminatory terms and conditions under such IPR to at least the following extent:

- MANUFACTURE, including the right to make or have made customized components and sub-systems to the licensee's own design for use in MANUFACTURE;
- sell, lease, or otherwise dispose of EQUIPMENT so MANUFACTURED;
- repair, use, or operate EQUIPMENT; and
- use METHODS.

The above undertaking may be made subject to the condition that those who seek licences agree to reciprocate.

6.2 At the request of the European Commission and/or EFTA, initially for a specific STANDARD or a class of STANDARDS, ETSI shall arrange to have carried out in a competent and timely manner an investigation including an IPR search, with the objective of ascertaining whether IPRs exist or are likely to exist which may be or may become ESSENTIAL to a proposed STANDARD and the possible terms and conditions of licences for such IPRs. This shall be subject to the European Commission and/or EFTA meeting all reasonable expenses of such an investigation, in accordance with detailed arrangements to be worked out with the European Commission and/or EFTA prior to the investigation being undertaken.

7 Information on IPR by ETSI

7.1 Any published STANDARD shall include information pertaining to ESSENTIAL IPRs which are brought to the attention of ETSI prior to such publication.

7.2 ETSI shall establish appropriate procedures to allow access to information at any time with respect to ESSENTIAL IPRs which have been brought to the attention of ETSI.

8 Non-availability of Licences

8.1 MEMBERS' refusal to license

8.1.1 Where a MEMBER notifies ETSI that it is not prepared to license an IPR in respect of a STANDARD, the General Assembly shall review the requirement for that STANDARD and satisfy itself that a viable alternative technology is available for the STANDARD which:

- is not blocked by that IPR; and
- satisfies ETSI's requirements.

8.1.2 Where, in the opinion of the General Assembly, no such viable alternative technology exists, work on the STANDARD shall cease, and the Director-General of ETSI shall request that MEMBER to reconsider its position. If the MEMBER decides not to withdraw its refusal to license the IPR, it shall inform the Director-General of ETSI of its decision and provide a written explanation of its reasons for refusing to license that IPR, within three months of its receipt of the Director-General's request.

ETSI Rules of Procedure, 18 November 1997

The Director-General shall then send the MEMBER's explanation together with relevant extracts from the minutes of the General Assembly to the ETSI Counsellors for their consideration.

8.2 Non-availability of licences from third parties

Where, in respect of a STANDARD, ETSI becomes aware that licences are not available from a third party in accordance with Clause 6.1 above, that STANDARD shall be referred to the Director-General of ETSI for further consideration in accordance with the following procedure:

- i) The Director-General shall request full supporting details from any MEMBER who has complained that licences are not available in accordance with Clause 6.1 above.
- ii) The Director-General shall write to the IPR owner concerned for an explanation and request that licences be granted according to Clause 6.1 above.
- iii) Where the IPR owner refuses the Director-General's request or does not answer the letter within three months, the Director-General shall inform the General Assembly. A vote shall be taken in the General Assembly on an individual weighted basis to immediately refer the STANDARD to the relevant COMMITTEE to modify it so that the IPR is no longer ESSENTIAL.
- iv) Where the vote in the General Assembly does not succeed, then the General Assembly shall, where appropriate, consult the ETSI Counsellors with a view to finding a solution to the problem. In parallel, the General Assembly may request appropriate MEMBERS to use their good offices to find a solution to the problem.
- v) Where (iv) does not lead to a solution, then the General Assembly shall request the European Commission to see what further action may be appropriate, including non-recognition of the STANDARD in question.

In carrying out the foregoing procedure due account shall be taken of the interest of the enterprises that have invested in the implementation of the STANDARD in question.

9 ETSI ownership of IPRs

- 9.1 The ownership of the copyright in STANDARDS documentation and reports created by ETSI or any of its COMMITTEES shall vest in ETSI but due acknowledgement shall be given to copyrights owned by third parties that are identifiable in ETSI copyrighted works.
- 9.2 In respect of IPRs other than copyright in STANDARDS documentation and reports, ETSI shall only seek ownership of IPRs generated either by its employees or by secondees to ETSI from organizations who are not MEMBERS.
- 9.3 ETSI shall, on request by a non-member, grant licences to that non-member on fair and reasonable terms and conditions in respect of any IPRs, other than those referred to in Clause 9.1 above, owned by ETSI. MEMBERS shall be allowed to use IPRs owned by ETSI free of charge.

10 Confidentiality

The proceedings of a COMMITTEE shall be regarded as non-confidential except as expressly provided below and all information submitted to a COMMITTEE shall be treated as if non-confidential and shall be available for public inspection unless:

- the information is in written or other tangible form; and

- the information is identified in writing, when submitted, as confidential; and
- the information is first submitted to, and accepted by, the chairman of the COMMITTEE as confidential.

CONFIDENTIAL INFORMATION incorporated in a STANDARD shall be regarded as non-confidential by ETSI and its MEMBERS, from the date on which the STANDARD is published.

11 Reproduction of Standards Documentation

MEMBERS may make copies of STANDARDS documentation produced by ETSI for their own use free of charge but may not distribute such copies to others.

12 Law and Regulation

The POLICY shall be governed by the laws of France. However, no MEMBER shall be obliged by the POLICY to commit a breach of the laws or regulations of its country or to act against supranational laws or regulations applicable to its country insofar as derogation by agreement between parties is not permitted by such laws.

Any right granted to, and any obligation imposed on, a MEMBER which derives from French law and which are not already contained in the national or supranational law applicable to that MEMBER is to be understood as being of solely a contractual nature.

13 Policy Decisions

Without prejudice to ETSI's Statutes and Rules of Procedure, no decisions shall be taken by ETSI in relation to implementation of the POLICY unless supported by a 71% majority of the weighted individual votes cast by MEMBERS.

14 Violation of Policy

Any violation of the POLICY by a MEMBER shall be deemed to be a breach, by that MEMBER, of its obligations to ETSI. The ETSI General Assembly shall have the authority to decide the action to be taken, if any, against the MEMBER in breach, in accordance with the ETSI Statutes.

15 Definitions

1 "AFFILIATE" of a first legal entity means any other legal entity:

- directly or indirectly owning or controlling the first legal entity, or
- under the same direct or indirect ownership or control as the first legal entity, or
- directly or indirectly owned or controlled by the first legal entity,

for so long as such ownership or control lasts.

Ownership or control shall exist through the direct or indirect:

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2 Definitions

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3 Policy Objectives

- 3.1 STANDARDS and TECHNICAL SPECIFICATIONS shall be based on solutions which best meet the technical objectives of the European telecommunications sector, as defined by the General Assembly. In order to further this objective the ETSI IPR POLICY seeks to reduce the risk to ETSI, MEMBERS, and others applying ETSI STANDARDS and TECHNICAL SPECIFICATIONS, that investment in the preparation, adoption and application of STANDARDS could be wasted as a result of an ESSENTIAL IPR for a STANDARD or TECHNICAL SPECIFICATION being unavailable. In achieving this objective, the ETSI IPR POLICY seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs.
- 3.2 IPR holders whether members of ETSI and their AFFILIATES or third parties, should be adequately and fairly rewarded for the use of their IPRs in the implementation of STANDARDS and TECHNICAL SPECIFICATIONS.
- 3.3 ETSI shall take reasonable measures to ensure, as far as possible, that its activities which relate to the preparation, adoption and application of STANDARDS and TECHNICAL SPECIFICATIONS, enable STANDARDS and TECHNICAL SPECIFICATIONS to be available to potential users in accordance with the general principles of standardization.

4 Disclosure of IPRs

- 4.1 Subject to Article 4.2 below, each MEMBER shall use its reasonable endeavours, in particular during the development of a STANDARD or TECHNICAL SPECIFICATION where it participates, to inform ETSI of ESSENTIAL IPRs in a timely fashion. In particular, a MEMBER submitting a technical proposal for a STANDARD or TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted.
- 4.2 The obligations pursuant to Clause 4.1 above do however not imply any obligation on MEMBERS to conduct IPR searches.

5 Procedures for Committees

ETSI shall establish guidelines for the chairmen of COMMITTEES with respect to ESSENTIAL IPRs.

6 Availability of Licences

- 6.1 When an ESSENTIAL IPR relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the owner to give within three months an undertaking in writing that it is prepared to grant irrevocable licences on fair, reasonable and non-discriminatory terms and conditions under such IPR to at least the following extent:
 - MANUFACTURE, including the right to make or have made customized components and sub-systems to the licensee's own design for use in MANUFACTURE;

Annex 6: ETSI Intellectual Property Rights Policy

1 Introduction

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2 Definitions

Terms in the POLICY which are written in capital letters shall have the meaning set forth in Clause 15 entitled DEFINITIONS.

3 Policy Objectives

- 3.1 It is ETSI's objective to create STANDARDS and TECHNICAL SPECIFICATIONS that are based on solutions which best meet the technical objectives of the European telecommunications sector, as defined by the General Assembly. In order to further this objective the ETSI IPR POLICY seeks to reduce the risk to ETSI, MEMBERS, and others applying ETSI STANDARDS and TECHNICAL SPECIFICATIONS, that investment in the preparation, adoption and application of STANDARDS could be wasted as a result of an ESSENTIAL IPR for a STANDARD or TECHNICAL SPECIFICATION being unavailable. In achieving this objective, the ETSI IPR POLICY seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs.
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- 4.2 The obligations pursuant to Clause 4.1 above do however not imply any obligation on MEMBERS to conduct IPR searches.
- 4.3 The obligations pursuant to Clause 4.1 above are deemed to be fulfilled in respect of all existing and future members of a PATENT FAMILY if ETSI has been informed of a member of this PATENT FAMILY in a timely fashion. Information on other members of this PATENT FAMILY, if any, may be voluntarily provided.

5 Procedures for Committees

ETSI shall establish guidelines for the chairmen of COMMITTEES with respect to ESSENTIAL IPRs.

6 Availability of Licences

- 6.1 When an ESSENTIAL IPR relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the

December 1995

IEEE

STANDARDS BOARD

BYLAWS



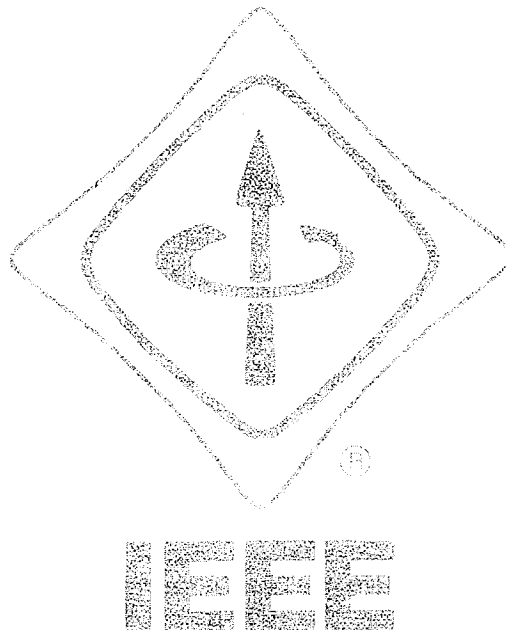
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IEEE standards may include the known use of patent(s), including patent applications, if there is technical justification in the opinion of the standards-developing committee and provided the IEEE receives assurance from the patent holder that it will license applicants under reasonable terms and conditions for the purpose of implementing the standard. This assurance shall be provided without coercion and prior to approval of the standard (or reaffirmation when a patent becomes known after initial approval of the standard). This assurance shall be a letter that is in the form of either

- a) A general disclaimer to the effect that the patentee will not enforce any of its present or future patent(s) whose use would be required to implement the proposed IEEE standard against any person or entity using the patent(s) to comply with the standard or
- b) A statement that a license will be made available to all applicants without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination



A4638

REMOVED DUE TO CONFIDENTIAL MATERIAL



US006359898B1

(12) **United States Patent**
Cudak et al.

(10) **Patent No.:** **US 6,359,898 B1**
(45) **Date of Patent:** **Mar. 19, 2002**

(54) **METHOD FOR PERFORMING A
COUNTDOWN FUNCTION DURING A
MOBILE-ORIGINATED TRANSFER FOR A
PACKET RADIO SYSTEM**

6,031,832 A * 2/2000 Turina 370/348

FOREIGN PATENT DOCUMENTS

(75) Inventors: **Mark Conrad Cudak**, McHenry;
Dominic Michael Tolti, Libertyville;
Jeffrey Charles Smolinske,
Schaumburg, all of IL (US)

WO WO 98/44639 * 10/1998
WO WO 98/44755 * 10/1998

OTHER PUBLICATIONS

(73) Assignee: **Motorola, Inc.**, Schaumburg, IL (US)

GSM Technical Specification 03.64 version 1.1.0 (Jan. 27, 1997).

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

* cited by examiner

(21) Appl. No.: **09/141,835**

Primary Examiner—Wellington Chin

(22) Filed: **Aug. 28, 1998**

Assistant Examiner—Maikhanh Tran

(74) *Attorney, Agent, or Firm*—Heather L. Mansfield

Related U.S. Application Data

(60) Provisional application No. 60/057,327, filed on Sep. 2, 1997.

(51) Int. Cl.⁷ **H04B 7/212**; H04Q 7/00;
H04Q 7/20; H04L 12/43; H04J 3/16

(52) U.S. Cl. **370/442**; 370/329; 370/458;
370/468; 455/464

(58) Field of Search 370/310, 314,
370/329, 347-348, 442-443, 437, 458,
465, 468; 455/464, 5/5

(56) References Cited

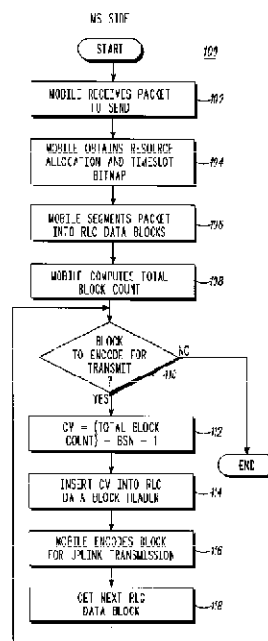
U.S. PATENT DOCUMENTS

5,926,469 A * 7/1999 Norstedt et al. 370/329

(57) ABSTRACT

The method for transmitting a communication signal comprising a plurality of units of information includes transmitting the plurality of units of information via a predetermined number of channel resources; determining a number of the plurality of units remaining in at least a portion of the communication signal; based on the predetermined number of channel resources, adjusting the number of the plurality of units remaining to produce an adjusted number of units remaining; and transmitting the adjusted number of units remaining to the wireless communication system.

11 Claims, 2 Drawing Sheets



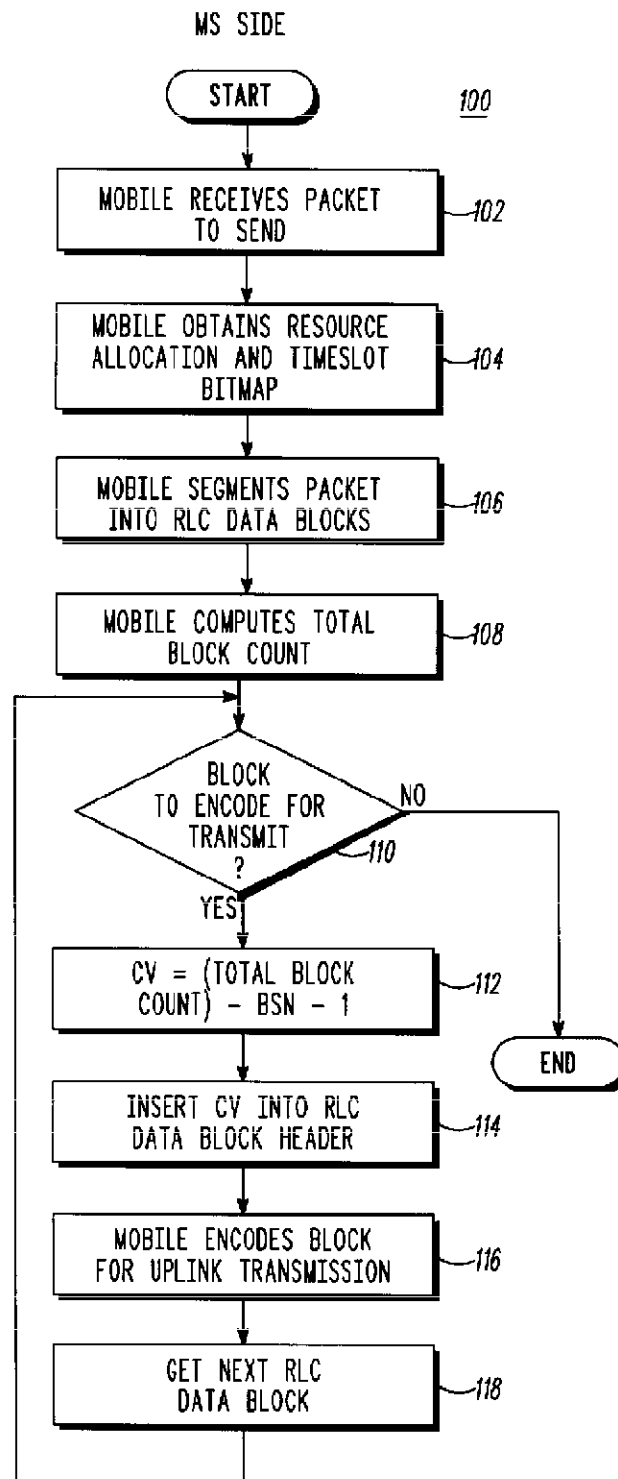
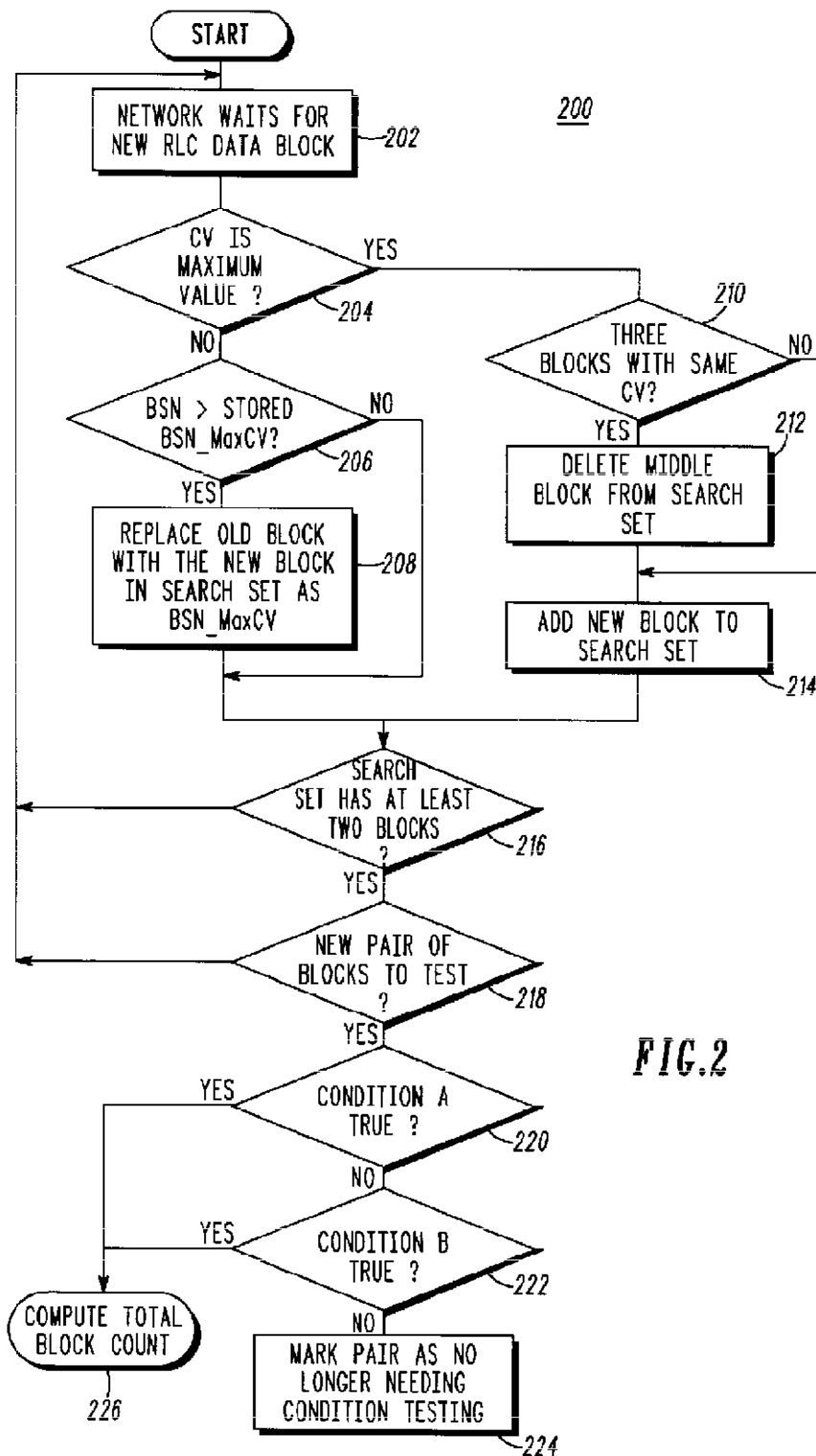


FIG.1



US 6,359,898 B1

1

METHOD FOR PERFORMING A COUNTDOWN FUNCTION DURING A MOBILE-ORIGINATED TRANSFER FOR A PACKET RADIO SYSTEM

This appln claims benefit of Provisional appln No. 60/057,327, filed Feb. 9, 1997.

TECHNICAL FIELD

This invention relates generally to packet information transmission and more particularly to early determination of a transmission block count which allows subsequent quick release of the transmission resources.

BACKGROUND OF THE INVENTION

Cellular radio telephone systems typically include subscriber units (such as mobile portable units) which communicate with network communications units (such as a fixed ground base station or an orbiting satellite base station) via radio frequency (RF) transmission. A typical communication network includes at least a base station and a switching center. In a packet radio system, information is transmitted in packets comprised of data blocks. Within the Global System for Mobile communications specification (GSM) 03.64 version 1.1.0, a countdown variable is used by a Mobile Station (MS) to identify the final data blocks in a packet of a mobile-originated transmission.

Ideally, the countdown procedure should commence with enough time to allow the network sufficient advance warning of the impending completion of the packet transmission. The earlier the network has this knowledge, the more intelligently it can allocate transmit resources for other MSs. When several time slots are being utilized during the mobile-originated transfer, the block countdown allows the MS to complete transmission several block frames before the network has knowledge of the impending completion. This is due to the channel and processing delays, the combination of which is several block frames in duration. As a result of this phenomenon, the network has not been able to reassign bandwidth to other MSs. Thus, the network continues to allocate blocks to a MS which has already completed its transmission and in the process wastes valuable transmission resources.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a flow chart illustrating a method for transmitting a communication signal according to a preferred embodiment of the present invention.

FIG. 2 is a flow chart illustrating a method for computing a total transmission block count in a wireless communications system according to a preferred embodiment of the present invention.

DETAILED DESCRIPTION OF THE DRAWINGS

In a preferred embodiment, the present invention operates in a time division multiple access wireless communication system such as a GSM system. Packet data logical channels are supported by a radio subsystem in accordance with the GSM Technical Specification "Project Scheduling and Open Issues" GSM 10.60. A new Countdown Value (CV) field is proposed for inclusion within the Radio Link Control (RLC) Data Block header, utilizing the bits of the Power Control (PC) field. The PC function is not utilized for blocks transmitted on the uplink.

As shown in the flowchart 100 of FIG. 1, on the mobile station side a mobile station receives a packet to send at step

2

102. After obtaining the resource allocation and time slot bit map at step 104, the mobile station segments the packet at step 106 into RLC data blocks. At step 108, instead of transmitting the count of remaining blocks to transmit, the CV is calculated by dividing the remaining block count by the number of time slots being utilized for the transfer as indicated in the Timeslot Bitmap field of the assignment message. The integer portion of this operation is retained, limited in size to the maximum value allowed by the field width, while the remainder from the division operation is discarded. For integer results too large to be signaled using the available bits of the Countdown Value, the maximal value shall be sent. This new CV estimates the number of block frames remaining in the transfer.

By obtaining several (as few as two) pairs of Block Sequence Numbers (BSNs, also contained within the RLC Data Block header) and CVs from successfully received RLC Data Blocks, the network can perform simple math to determine the intended total block count of the transfer. Additionally, this information is conveyed to the network much earlier in time by using a block frame estimate than the current method for counting down.

An iterative routine is entered at step 110, and as shown at step 112, the CV can be computed during the segmentation operation, just as the current method allows. For a single-slot MS, the CV is equivalent to a method counting down the discrete number of remaining blocks, since in that case the number of blocks is the same as the block frame estimate. However, for all other multi-slot classes, the proposed method prevents the wasting of transmission resources by improving the response time of the network allocation engine. The mobile station inserts the CV into the RLC data block header, encodes the block for uplink transmission and obtains the next RLC data block at steps 114, 116 and 118, respectively.

The Countdown Value provides the network with the ability to accurately estimate and exactly calculate the total block count for the transmission, particularly when such information previously has not been indicated. As shown in the flowchart 200 of FIG. 2, upon network reception of a new RLC data block at step 202, at step 204 the first block whose Countdown Value is less than the maximum, the network shall monitor subsequent Countdown Values in order to determine the number of blocks remaining in the transmission. The total block count may be computed if one of the following two conditions is satisfied:

$$BSN2 - BSN1 = YN + 1 \text{ and } CV1 = CV2 + Y + 1; \quad \text{Condition A:}$$

then, the total block count = $BSN2 + ((CV2 + 1) * N)$

$$BSN2 - BSN1 = YN - 1 \text{ and } CV1 = CV2 = Y - 1 (\text{note } Y > 0) \quad \text{Condition B:}$$

then, the total block count = $BSN2 + 1 + (CV2 * N)$

Where,

N = number of slots in timeslot bitmap (>0)

Y = some non-negative integer (>=0)

BSN1 = block sequence number of some block #1

CV1 = Countdown Value of block #1 (>=0)

BSN2 = block sequence number of some block #2

CV2 = Countdown Value of block #2 (>=0)

BSN1 < BSN2

BSN >= 0

CV

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3

=remaining blocks to send/N
 =(total block count-BSN-1)/N

0<=CV<N [no more than one of the CVs can equal (N-1)]
 Thus, in the preferred embodiment of the present invention, prior to performing the above tests, a block may merit inclusion in the search set in accordance with the steps shown in FIG. 2 (206-226):

if CV=max, store block in search set if it has the largest BSN
 if CV<max, add block to search set
 if # of blocks in search set>1, perform tests A & B above on each pair of blocks in search set (only needs to be done once per pair)

According to the suggested block gathering algorithm above, for each block added to the search set, the number of tests which must be performed to find a pair satisfying conditions A or B above (two tests per pair) increases as illustrated by Eqs. 1.1 and 1.2.

$$z^*(z-1), \quad \text{Eqn. 1.1}$$

where z is the smaller set size, to

$$z^*(z+1). \quad \text{Eqn. 1.2}$$

This results in an increase of (2*z) tests per added block.

While the total number of tests to perform may seem to increase significantly for each added block, not every pair comparison needs to be made. This is because comparisons already performed on block pairs are still valid. Thus, a maximum of (2*z) tests only need to be performed when blocks are newly added, where z is the former size of the search set. Additionally, it is not anticipated that many blocks will be necessary to perform this search. While true that only specific blocks (those residing on the "boundaries" where the Countdown Value changes) can be utilized to satisfy one of the tests above, the Table I below describes the set of these key blocks.

TABLE I

Timeslots in bitmap	Number of boundary blocks	Total blocks CV is valid	Percentage of Total
1	8	8	100
2	15	15	100
3	15	22	68
4	15	29	52
5	15	36	42
6	15	43	35
7	15	50	30
8	15	57	26

Table I shows results when utilizing a three-bit countdown field. The corresponding results for the final column with a four-bit countdown field are within 1% of those shown. Note that only a handful of blocks needs to be gathered for the one and two timeslot cases. As two appropriate search set blocks must be gathered, and not all sets of two boundary blocks will satisfy a test (each block may be appropriate for separate tests), on average more search set blocks than indicated above by the final column may need to be gathered when multiple timeslots are utilized. For instance, more than four search set blocks likely will need to be gathered for the 8-slot user case. As 74% (for the 8-slot case) of the total blocks whose Countdown Value can be utilized for the tests cannot be used to determine the total block count, a larger number of blocks (perhaps ten) may be required before a successful pair is found within the search set.

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However, the transmission, and therefore the reception, of blocks will be somewhat sequential rather than random. This reception pattern should allow an appropriate block pair to be received successfully sooner than when the blocks are sent in a random or non-ordered scheme. Additionally, certain search set blocks may be removed from consideration if it can be detected that they cannot be boundary blocks. For instance, when test B above fails but the Countdown Value does not change between two blocks with increasing sequence number, one of the blocks will be eliminated from the search set. Also, reception of blocks which are not added to the search set delays the time at which tests need to be performed. This correspondingly increases the likelihood of later receiving a boundary block. Finally, the relatively low (under 10%) block error rate should make successful block reception a common event, preserving the sequential order of the received blocks.

For all these reasons, restricted computational resources will not be consumed by the increasing number of simple tests performed when the search set increases in size, even when the timeslot utilization is high. The simple algorithm above will allow the detection of the total block count when using the newly-proposed CV quicker than with the currently defined countdown field. The countdown variable is to utilize the PC field of the RLC Data Block header. The PC field is not used for uplink data transfers, providing a location for the countdown field. The bits of the field count down the final blocks of the transfer so that the network may recognize the impending completion of data block transfer.

We claim:

1. In a wireless communication system, a method for transmitting a communication signal comprising a plurality of units of information, the method comprising:

transmitting the plurality of units of information via a predetermined number of channel resources;
 determining a number of the plurality of units remaining in at least a portion of the communication signal;
 based on the predetermined number of channel resources, adjusting the number of the plurality of units remaining to produce an adjusted number of units remaining; and
 transmitting the adjusted number of units remaining to the wireless communication system.

2. The method according to claim 1, wherein the step of adjusting further comprises:

dividing the number of the plurality of units remaining by the predetermined number of channel resources.

3. The method according to claim 2, wherein the adjusted number of units remaining comprises a quotient resulting from the step of dividing.

4. The method according to claim 1, further comprising: prior to the step of determining, detecting that the communication signal should be transferred to another communication unit.

5. The method according to claim 1, wherein the predetermined number of channel resources is greater than one.

6. The method according to claim 1, wherein the wireless communication system comprises a time division multiple access communication system.

7. The method according to claim 6, wherein each of the predetermined channel resources comprises a time slot.

8. The method according to claim 7, wherein the step of transmitting further comprises:

inserting the adjusted number of units remaining into a power control field of each of the time slots.

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9. A method for allocating channel resources in a wireless communication system, comprising:

receiving a communication signal comprising a plurality of units of information, the communication signal transmitted via a predetermined number of channel resources;

examining the communication signal to determine a number of the plurality of units to be received, the number of the plurality of units to be received representing a number of the plurality of units remaining in at least a portion of the communication signal, the number of the plurality of units remaining adjusted based on the predetermined number of channel resources; and

6

based on the number of the plurality of units to be received, allocating the predetermined number of channel resources.

10. The method according to claim 9, wherein the number of the plurality of units to be received represents a quotient resulting from a division of the number of the plurality of units remaining by the predetermined number of channel resources.

11. The method according to claim 9, wherein the step of examining the communication signal comprises examining a power control field.

* * * * *

69558 U.S. PTO
60/057,327
09/02/97
Class Subclass
ISSUE CLASSIFICATION
SCANNED

PROVISIONAL
APPLICATION
NUMBER

SERIAL NUMBER 60/057,327 FILING DATE 09/02/97 CLASS SUBCLASS GROUP ART UNIT EXAMINER
PROVISIONAL

APPLICANTS MARK C. CUDAK, MCHENRY, IL; DOMINIC M. TOLLI, LIBERTYVILLE, IL;
JEFFERY C. SMOLINSKE, SCHAUMBURG, IL.

CONTINUING DATA**
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FOREIGN/PCT APPLICATIONS**
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Foreign priority claimed 35 USC 119 conditions met	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> yes <input type="checkbox"/> no	AS FILED →	STATE OR COUNTRY IL	SHEETS DRWGS. 2	TOTAL CLAIMS	INDEP. CLAIMS	FILING FEE RECEIVED \$150.00	ATTORNEY'S DOCKET NO. CE03562R
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Verified and Acknowledged. Examiner's Initials
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INTELLECTUAL PROPERTY DEPARTMENT
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CAROL STREAM IL 60196

METHOD FOR PERFORMING A COUNTDOWN FUNCTION DURING A MOBILE ORIGINATED
TRANSFER FOR A PACKET RADIO SYSTEM

U.S. DEPT. OF COMM./ PAT. & TM—PTO-436L (Rev.12-94)

Form PTO-1625
(Rev. 5/95)

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09/02/97

PATENT APPLICATION

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1. application _____ papers.
2. *Request for Access* *1-26-05*
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Express Mail No. EH914493137

CE03562R-Cudak Provisional Filing

**METHOD FOR PERFORMING A COUNTDOWN FUNCTION
DURING A MOBILE-ORIGINATED
TRANSFER FOR A PACKET RADIO SYSTEM**

TECHNICAL FIELD

This invention relates generally to packet information transmission and more particularly to early determination of a transmission block count which allows subsequent quick release of the transmission resources.

BACKGROUND OF THE INVENTION

Cellular radio telephone systems typically include subscriber units (such as mobile portable units) which communicate with network communications units (such as a fixed ground base station or an orbiting satellite base station) via radio frequency (RF) transmission. A typical communication network includes at least a base station and a switching center. In a packet radio system, information is transmitted in packets comprised of data blocks. Within the Global System for Mobile communications specification (GSM) 03.64 version 1.1.0, a countdown variable is used by a Mobile Station (MS) to identify the final data blocks in a packet of a mobile-originated transmission.

Ideally, the countdown procedure should commence with enough time to allow the network sufficient advance warning of the impending completion of the packet transmission. The earlier the network has this knowledge, the more intelligently it can allocate transmit resources for other MSs. When several time slots are being utilized during the mobile-originated transfer, the block countdown allows the MS to complete transmission several block frames before the network has knowledge of the impending completion. This is due to the channel and processing delays, the combination of which is several block frames in duration. As a result of this phenomenon, the network has not been able to reassign bandwidth to other MSs. Thus, the network continues to allocate blocks to a MS which has already completed its transmission and in the process wastes valuable transmission resources.

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BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a flow chart illustrating a method for transmitting a communication signal according to a preferred embodiment of the present invention.

FIG. 2 is a flow chart illustrating a method for computing a total transmission block count in a wireless communications system according to a preferred embodiment of the present invention.

DETAILED DESCRIPTION OF THE DRAWINGS

In a preferred embodiment, the present invention operates in a time division multiple access wireless communication system such as a GSM system. Referring now to FIG. 1, packet data logical channels are supported by a radio subsystem (not shown), in accordance with the GSM Technical Specification "Project Scheduling and Open Issues" GSM 10.60. A new Countdown Value (CV) field is proposed for inclusion within the Radio Link Control (RLC) Data Block header, utilizing the bits of the Power Control (PC) field. The PC function is not utilized for blocks transmitted on the uplink.

Instead of transmitting the count of remaining blocks to transmit, the CV is calculated by dividing the remaining block count by the number of time slots being utilized for the transfer as indicated in the Timeslot Bitmap field of the assignment message. The integer portion of this operation is retained, limited in size to the maximum value allowed by the field width, while the remainder from the division operation is discarded. For integer results too large to be signaled using the available bits of the Countdown Value, the maximal value shall be sent. This new CV estimates the number of block frames remaining in the transfer.

By obtaining several (as few as two) pairs of Block Sequence Numbers (BSNs, also contained within the RLC Data Block header) and CVs from successfully received RLC Data Blocks, the network can perform simple math to determine the intended total block count of the transfer. Additionally, this information is conveyed to the network much earlier in time by using a block frame estimate than the current method for counting down.

The CV can be computed during the segmentation operation, just as the current method allows. For a single-slot MS, the CV is equivalent to a method

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counting down the discrete number of remaining blocks, since in that case the number of blocks is the same as the block frame estimate. However, for all other multi-slot classes, the proposed method prevents the wasting of transmission resources by improving the response time of the network allocation engine.

- 5 The Countdown Value provides the network with the ability to accurately estimate and exactly calculate the total block count for the transmission, particularly when such information previously has not been indicated. Upon network reception of the first block whose Countdown Value is less than the maximum, the network shall monitor subsequent Countdown Values in order to determine the
- 10 number of blocks remaining in the transmission. The total block count may be computed if one of the following two conditions is satisfied:

Condition A: $BSN2 - BSN1 = YN + 1$ and $CV1 - CV2 = Y + 1$;

15 then, the total block count = $BSN2 + ((CV2 + 1) * N)$

Condition B: $BSN2 - BSN1 = YN - 1$ and $CV1 - CV2 = Y - 1$ (note: $Y > 0$)

then, the total block count = $BSN2 + 1 + (CV2 * N)$

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Where, N = number of slots in timeslot bitmap (> 0)
 Y = some non-negative integer (>= 0)
 BSN1 = block sequence number of some block #1
 CV1 = Countdown Value of block #1 (>= 0)
 5 BSN2 = block sequence number of some block #2
 CV2 = Countdown Value of block #2 (>= 0)
 BSN1 < BSN2
 BSN >= 0
 CV = remaining blocks to send / N
 10 = (total block count - BSN - 1) / N
 0 <= CV < N [no more than one of the CVs can equal (N - 1)]

Thus, in the preferred embodiment of the present invention, prior to performing the above tests, a block may merit inclusion in the search set in accordance with the following:

if CV = max, store block in search set if it has the largest BSN
 if CV < max, add block to search set
 20 if # of blocks in search set > 1, perform tests A & B above on each pair of blocks in search set (only needs to be done once per pair)

According to the suggested block gathering algorithm above, for each block added to the search set, the number of tests which must be performed to find a pair satisfying conditions A or B above (two tests per pair) increases as illustrated by Eqns. 1.1 and 1.2.

$$\text{Eqn. 1.1} \quad z * (z - 1),$$

30 where z is the smaller set size, to

$$\text{Eqn. 1.2} \quad z * (z + 1).$$

This results in an increase of (2 * z) tests per added block.

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While the total number of tests to perform may seem to increase significantly for each added block, not every pair comparison needs to be made. This is because comparisons already performed on block pairs are still valid. Thus, a maximum of $(2 * z)$ tests only need to be performed when blocks are newly added, where z is the former size of the search set. Additionally, it is not anticipated that many blocks will be necessary to perform this search. While true that only specific blocks (those residing on the "boundaries" where the Countdown Value changes) can be utilized to satisfy one of the tests above, the Table I below describes the set of these key blocks.

TABLE I

Timeslots in bitmap	Number of boundary blocks	Total blocks CV is valid	Percentage of Total
1	8	8	100
2	15	15	100
3	15	22	68
4	15	29	52
5	15	36	42
6	15	43	35
7	15	50	30
8	15	57	26

Table I shows results when utilizing a three-bit countdown field. The corresponding results for the final column with a four-bit countdown field are within 1% of those shown. Note that only a handful of blocks needs to be gathered for the one and two timeslot cases. As two appropriate search set blocks must be gathered, and not all sets of two boundary blocks will satisfy a test (each block may be appropriate for separate tests), on average more search set blocks than indicated above by the final column may need to be gathered when multiple timeslots are utilized. For instance, more than four search set blocks likely will need to be gathered for the 8-slot user case. As 74% (for the 8-slot case) of the total blocks whose

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Countdown Value can be utilized for the tests cannot be used to determine the total block count, a larger number of blocks (perhaps ten) may be required before a successful pair is found within the search set.

5 However, the transmission, and therefore the reception, of blocks will be somewhat sequential rather than random. This reception pattern should allow an appropriate block pair to be received successfully sooner than when the blocks are sent in a random or non-ordered scheme. Additionally, certain search set blocks may be removed from consideration if it can be detected that they cannot be boundary blocks. For instance, when test B above fails but the Countdown Value
10 does not change between two blocks with increasing sequence number, one of the blocks will be eliminated from the search set. Also, reception of blocks which are not added to the search set delays the time at which tests need to be performed. This correspondingly increases the likelihood of later receiving a boundary block. Finally, the relatively low (under 10%) block error rate should make successful block
15 reception a common event, preserving the sequential order of the received blocks.

For all these reasons, restricted computational resources will not be consumed by the increasing number of simple tests performed when the search set increases in size, even when the timeslot utilization is high. The simple algorithm above will allow the detection of the total block count when using the newly-
20 proposed CV quicker than with the currently defined countdown field. The countdown variable is to utilize the PC field of the RLC Data Block header. The PC field is not used for uplink data transfers, providing a location for the countdown field. The bits of the field count down the final blocks of the transfer so that the network may recognize the impending completion of
25 data block transfer.

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We Claim:

1. In a wireless communication system, a method for transmitting a
5 communication signal comprising a plurality of units of information, the method
comprising:

transmitting the plurality of units of information via a predetermined
number of channel resources;

10

determining a number of the plurality of units remaining in at least a portion
of the communication signal;

15 based on the predetermined number of channel resources, adjusting the
number of the plurality of units remaining to produce an adjusted number of units
remaining; and

transmitting the adjusted number of units remaining to the wireless
communication system.

20

2. The method according to claim 1, wherein the step of adjusting further
comprises:

dividing the number of the plurality of units remaining by the
predetermined number of channel resources.

25

3. The method according to claim 2, wherein the adjusted number of
units remaining comprises a quotient resulting from the step of dividing.

4. The method according to claim 1, further comprising:
30 prior to the step of determining, detecting that the communication signal
should be transferred to another communication unit.

5. The method according to claim 1, wherein the predetermined number
of channel resources is greater than one.

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6. The method according to claim 1, wherein the wireless communication system comprises a time division multiple access communication system.

7. The method according to claim 6, wherein each of the predetermined channel resources comprises a time slot.

8. The method according to claim 7, wherein the step of transmitting further comprises:
inserting the adjusted number of units remaining into a power control field of each of the time slots.

9. A method for allocating channel resources in a wireless communication system, comprising:

receiving a communication signal comprising a plurality of units of information, the communication signal transmitted via a predetermined number of channel resources;

examining the communication signal to determine a number of the plurality of units to be received, the number of the plurality of units to be received representing a number of the plurality of units remaining in at least a portion of the communication signal, the number of the plurality of units remaining adjusted based on the predetermined number of channel resources; and

based on the number of the plurality of units to be received, allocating the predetermined number of channel resources.

10. The method according to claim 9, wherein the number of the plurality of units to be received represents a quotient resulting from a division of the number of the plurality of units remaining by the predetermined number of channel resources.

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11. The method according to claim 9, wherein the step of examining the communication signal comprises examining a power control field.

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MS side

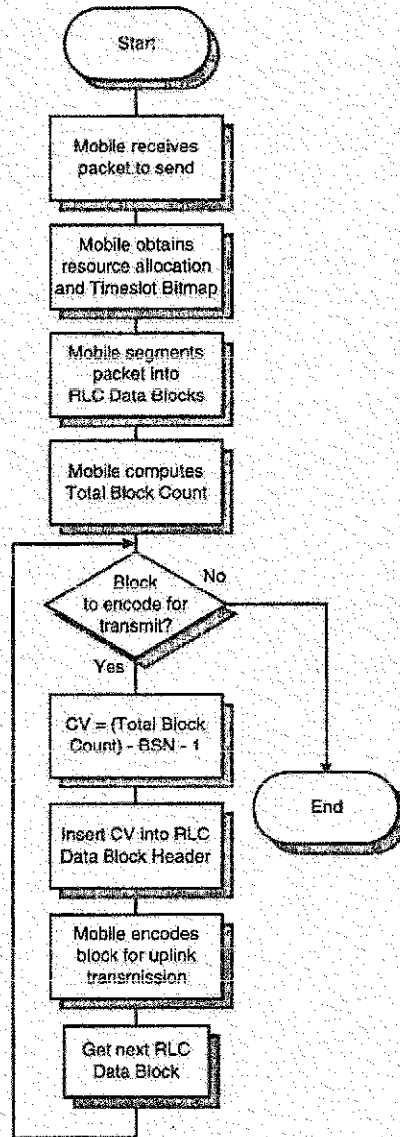


FIG. 1

Network side

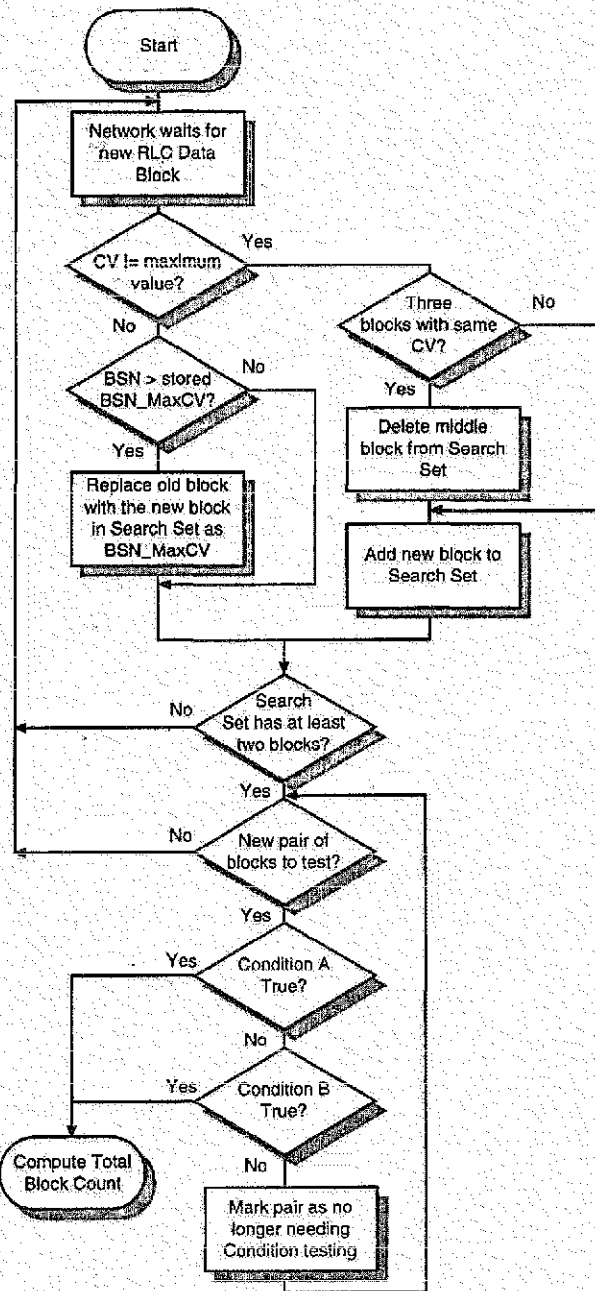


FIG. 2

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Patent as

PTO/SB/16 (6-95)
Approved for use through 04/11/95, OMB 0651-0037
mark Office: U.S. DEPARTMENT OF COMMERCE**PROVISIONAL APPLICATION COVER SHEET**A/Prov
B

This is a request for filing a PROVISIONAL APPLICATION under 37 CFR 1.53 (b)(2).

69861 US-PTO
09/02/97

Declass Number		CE03562R		Type a plus sign (+) inside this box ->	
INVENTOR(S)/AFFILIANT(S)					
LAST NAME	FIRST NAME	MIDDLE INITIAL	RESIDENCE (CITY AND EITHER STATE OR FOREIGN COUNTRY)		
Cudak	Mark	C	McHenry, Illinois		
Tolli	Dominic	M	Libertyville, Illinois		
Smolinske	Jeffery	C	Schaumburg, Illinois		
TITLE OF THE INVENTION (250 characters max)					
Method for Performing a Countdown Function During a Mobile Originated Transfer for a Packet Radio System					
CORRESPONDENCE ADDRESS					
Motorola, Inc. Intellectual Property Department 1303 E. Algonquin Road					
STATE	IL	ZIP CODE	60196	COUNTRY	USA
ENCLOSED APPLICATION PARTS (check all that apply)					
<input checked="" type="checkbox"/>	Specification	Number of Pages	9	<input type="checkbox"/>	Small Entity Statement
<input checked="" type="checkbox"/>	Drawing(s)	Number of Sheets	2	<input type="checkbox"/>	Other (specify)
METHOD OF PAYMENT (check one)					
<input type="checkbox"/>	A check or money order is enclosed to cover the Provisional filing fee				PROVISIONAL FILING FEE AMOUNT (\$)
<input checked="" type="checkbox"/>	The Commissioner is hereby authorized to charge filing fees and credit Deposit Account Number: 13-4772				
150.00					

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

☐ No.☐ Yes, the name of the U.S. Government agency and the Government contract number are: _____

Respectfully submitted,

SIGNATURE

Charlotte B. Whitaker

Date

9/2/97

TYPED or PRINTED NAME

Charlotte B. Whitaker

REGISTRATION NO.
(if appropriate)

34,043

☐

Additional inventors are being named on separately numbered sheets attached hereto

PROVISIONAL APPLICATION FILING ONLY

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69556 U.S. PTO

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09/02/97

PATENT APPLICATION SERIAL NO.

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11/03/1997 GRAYNE 00000014 DAN:134772 60057327
01 FC:114 150.00 CH

PTO-1556
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A4817

FTO/S2/82 (37-CFR)
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Application Number 601057327	Filed 9-2-97			

I hereby request access under 37 CFR 1.14(a)(1)(iv) to the application file record of the above-identified ABANDONED application, which is identified in, or to which a benefit is claimed, in the following document (as shown in the attachment):

United States Patent Application Publication No. _____, page, _____ line _____

United States Patent Number 6359 878, column _____, line, _____ or _____

WIPO Pub. No. _____, page _____, line _____

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- the file contents;
- the pending application as originally filed; or
- any document in the file of the pending application.

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US006359898B1

United States Patent

Cudak et al.

(10) Patent No.: **US 6,359,898 B1**
 (45) Date of Patent: **Mar. 19, 2002**

(54) **METHOD FOR PERFORMING A COUNTDOWN FUNCTION DURING A MOBILE-ORIGINATED TRANSFER FOR A PACKET RADIO SYSTEM**

6,031,832-A * 22000; Tada 370/348

FOREIGN PATENT DOCUMENTS

WO WO 98/44538 * 10/1998
 WO WO 98/44755 * 10/1998

OTHER PUBLICATIONS

GSM Technical Specification 03.64 version 1.1.0 (Jan. 27, 1997).

* cited by examiner.

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: 09/141,833

(22) Filed: Aug. 28, 1998

Related U.S. Application Data

(60) Provisional application No. 60/037,327, filed on Sep. 2, 1997.

(51) Int. Cl.⁷ H04B 7/212; H04Q 7/00;
 H04Q 7/20; H04L 12/43; H04L 3/10

(52) U.S. Cl. 370/442; 370/329; 370/458;
 370/468; 455/464

(58) Field of Search 370/310, 314,
 370/329, 347-348, 442-443, 437, 458,
 465, 468; 455/454, 575

References Cited

U.S. PATENT DOCUMENTS

5,926,469-A * 7/1999 Norstedt et al. 370/329

Primary Examiner—Wellington Chin

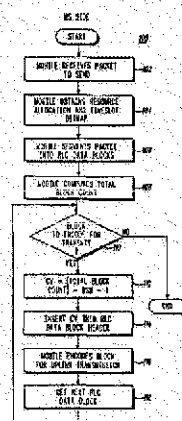
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ABSTRACT

The method for transmitting a communication signal comprising a plurality of units of information includes transmitting the plurality of units of information via a predetermined number of channel resources; determining a number of the plurality of units remaining in at least a portion of the communication signal; based on the predetermined number of channel resources, adjusting the number of the plurality of units remaining to produce an adjusted number of units remaining; and transmitting the adjusted number of units remaining to the wireless communication system.

11 Claims, 2 Drawing Sheets



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ETSI TS 144 060 V4.1.0 (2001-04)

Technical Specification

**Digital cellular telecommunications system (Phase 2+);
General Packet Radio Service (GPRS);
Mobile Station (MS) - Base Station System (BSS) interface;
Radio Link Control/ Medium Access Control (RLC/MAC)
protocol
(3GPP TS 44.060 version 4.1.0 Release 4)**



Reference

DTS/TSGG-0244060Uv4

Keywords

GSM

ETSI

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ISSUING CLASSIFICATION							
ORIGINAL		CROSS REFERENCE(S)					
CLASS	SUBCLASS	CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)				
370	335	370	208				
INTERNATIONAL CLASSIFICATION							
HQ/T	13/00	.					
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Form PTO-438A
(Rev. 5/04)

WI-Apple0148293

US006175559B1

(12) **United States Patent**
Brown

(10) **Patent No.:** US 6,175,559 B1
(45) **Date of Patent:** Jan. 16, 2001

(54) **METHOD FOR GENERATING PREAMBLE SEQUENCES IN A CODE DIVISION MULTIPLE ACCESS SYSTEM**

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(73) **Assignee:** Motorola, Inc., Schaumburg, IL (US)

(*) **Notice:** Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.

(21) **Appl. No.:** 09/348,571

(22) **Filed:** Jul. 7, 1999

(51) **Int. Cl. 7** H04J 13/00

(52) **U.S. Cl.** 370/335; 370/208

(58) **Field of Search** 370/320, 335, 370/342, 479, 393, 441, 208, 203; 375/140, 141, 146, 147

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,260,976 * 11/1993 Dolivo et al. 375/94
5,457,704 * 10/1995 Hoehner et al. 371/43
5,790,537 * 8/1998 Yoon et al. 370/342

* cited by examiner

Primary Examiner—Douglas W. Olms

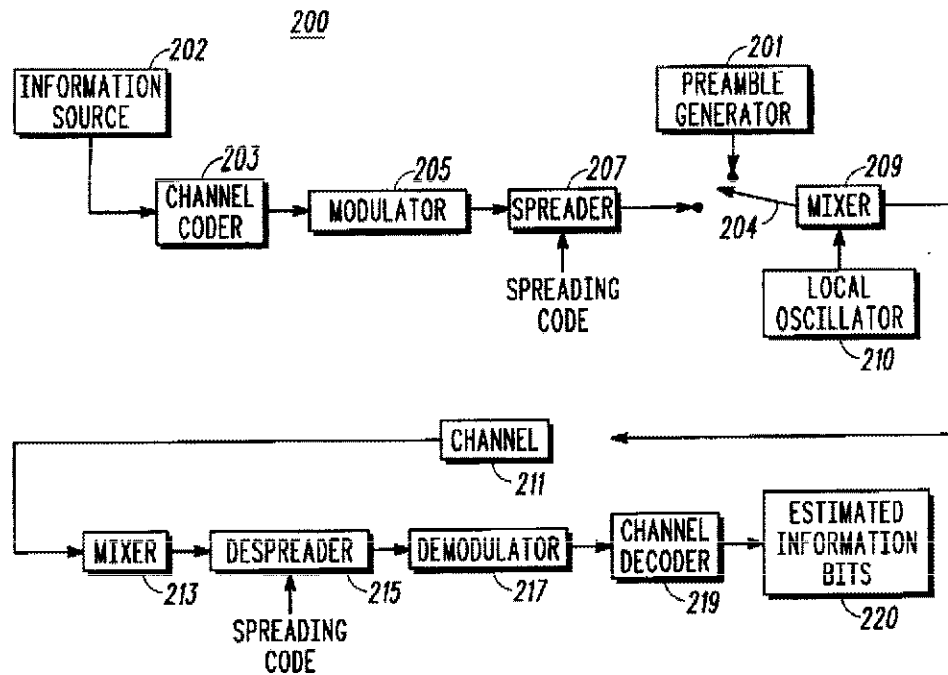
Assistant Examiner—Ken Vanderpuye

(74) *Attorney, Agent, or Firm*—Kenneth A. Haas

(57) **ABSTRACT**

The present invention provides a method for generating preamble sequences in a code division multiple access system. The method includes forming an outer code in a mobile station. The mobile station forms an inner code. The mobile station multiplies the outer code to the inner code to generate the preamble sequence.

8 Claims, 3 Drawing Sheets



3G TS 25.213 V3.2.0 (2000-03)

Technical Specification

3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Spreading and modulation (FDD) (Release 1999)



The present document has been developed within the 3rd Generation Partnership Project (3GPPTM) and may be further elaborated for the purposes of 3GPP.

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A5272

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US006246697B1

(12) **United States Patent**
Whinnett et al.

(10) Patent No.: **US 6,246,697 B1**
(45) Date of Patent: **Jun. 12, 2001**

(54) **METHOD AND SYSTEM FOR GENERATING A COMPLEX PSEUDONOISE SEQUENCE FOR PROCESSING A CODE DIVISION MULTIPLE ACCESS SIGNAL**

(75) Inventors: Nicholas William Whinnett, Paris (FR); Kevin Michael Laird, Keller, TX (US)

(73) Assignee: Motorola, Inc., Schaumburg, IL (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: 09/012,927

(22) Filed: Jan. 24, 1998

(51) Int. Cl.⁷ H04J 1/00

(52) U.S. Cl. 370/479; 375/206

(58) Field of Search 370/342, 479, 370/350, 335, 441, 515, 516, 215; 375/205, 206, 208, 365, 367, 371

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,774,715 * 9/1988 Messenger
5,020,075 * 5/1991 Tachika
5,440,597 * 8/1995 Caug et al. 375/205
5,687,166 * 11/1997 Natali et al. 370/209

* cited by examiner

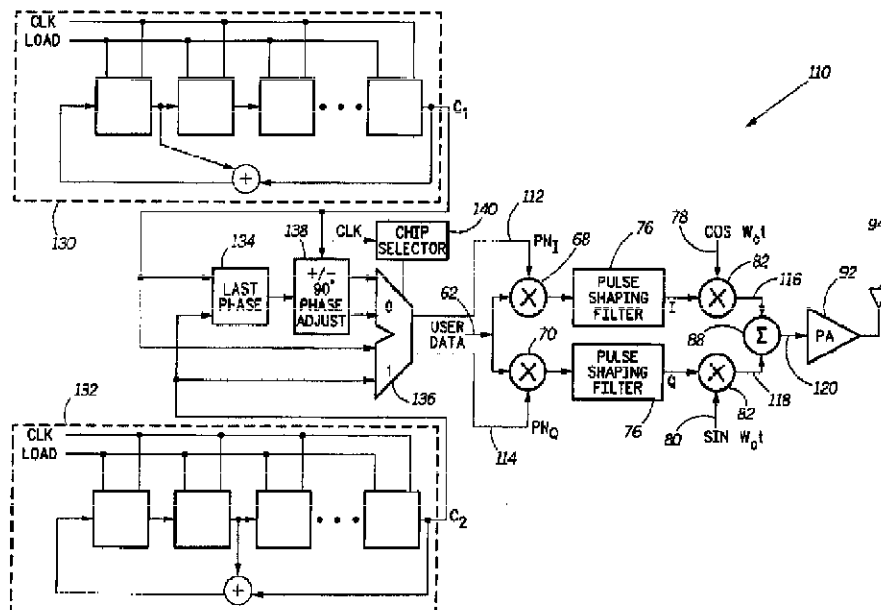
Primary Examiner—Huy D. Vu

(74) Attorney, Agent, or Firm—L. Bruce Terry

(57) **ABSTRACT**

In a wireless communication system, a chip time is selected in a complex pseudonoise (PN) sequence generator. For a next chip time following the selected chip time, a phase difference between a previous complex PN chip and a next complex PN chip is restricted to a preselected phase angle. In one embodiment, every other chip time is selected and the preselected angle is 90 degrees.

16 Claims, 4 Drawing Sheets



A5306 – 5311

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3G TS 25.213 V3.1.1 (1999-12)

Technical Specification

**3rd Generation Partnership Project;
Technical Specification Group Radio Access Network;
Spreading and modulation (FDD)
(3G TS 25.213 version 3.1.0)**



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Reference

3TS/TSGR-0125213U

Keywords

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Foreword

This Technical Specification has been produced by the 3GPP.

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of this TS, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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where:

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 - 1 presented to TSG for information;
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- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the specification.

1 Scope

The present document describes spreading and modulation for UTRA Physical Layer FDD mode.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific
- For a specific reference, subsequent revisions do not apply
- For a non-specific reference, the latest version applies.

- [1] 3G TS 25.201: "Physical layer - general description".
- [2] 3G TS 25.211: "Physical channels and mapping of transport channels onto physical channels (FDD)".
- [3] 3G TS 25.101: "UE Radio transmission and Reception (FDD)".
- [4] 3G TS 25.104: "UTRA (BS) FDD: Radio transmission and Reception"

3 Symbols and abbreviations

3.1 Symbols

For the purposes of the present document, the following symbols apply

$C_{ch,SF,n}$	n th channelisation code with spreading factor SF
$C_{pr,us}$	PRACH preamble code for n th preamble scrambling code and signature s
$C_{c-acc,n,s}$	PCPCH access preamble code for n th preamble scrambling code and signature s
$C_{c-cd,us}$	PCPCH CD preamble code for n th preamble scrambling code and signature s
$C_{sig,s}$	PRACH/PCPCH signature code for signature s
$S_{long,n}$	n th DPCCCH/DPDCH long uplink scrambling code
$S_{short,n}$	n th DPCCCH/DPDCH short uplink scrambling code
$S_{r-pre,n}$	n th PRACH preamble scrambling code
$S_{r-msg,n}$	n th PRACH message scrambling code
S_{c-acc}	n th PCPCH access preamble scrambling code
S_{c-cd}	n th PCPCH CD preamble scrambling code
$S_{c-msg,n}$	n th PCPCH message scrambling code
$S_{dl,n}$	DL scrambling code
C_{psc}	PSC code
$C_{ssc,n}$	n th SSC code

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

AICH	Acquisition Indicator Channel
AP	Access Preamble
BCH	Broadcast Control Channel
CCPCH	Common Control Physical Channel
CD	Collision Detection
CPCCH	Common Packet Channel
CPICH	Common Pilot Channel
DCH	Dedicated Channel

DPCH	Dedicated Physical Channel
DPCCH	Dedicated Physical Control Channel
DPDCH	Dedicated Physical Data Channel
FDD	Frequency Division Duplex
Mcps	Mega Chip Per Second
OVSF	Orthogonal Variable Spreading Factor (codes)
PD SCH	Physical Dedicated Shared Channel
PICH	Page Indication Channel
PRACH	Physical Random Access Channel
PSC	Primary Synchronisation Code
RACH	Random Access Channel
SCH	Synchronisation Channel
SSC	Secondary Synchronisation Code
SF	Spreading Factor
UE	User Equipment
USTS	Uplink Synchronous Transmission Scheme

4 Uplink spreading and modulation

4.1 Overview

Spreading is applied to the physical channels. It consists of two operations. The first is the channelization operation, which transforms every data symbol into a number of chips, thus increasing the bandwidth of the signal. The number of chips per data symbol is called the Spreading Factor (SF). The second operation is the scrambling operation, where a scrambling code is applied to the spread signal.

With the channelization, data symbols on so-called I- and Q-branches are independently multiplied with an OVSF code. With the scrambling operation, the resultant signals on the I- and Q-branches are further multiplied by complex-valued scrambling code, where I and Q denote real and imaginary parts, respectively.

4.2 Spreading

4.2.1 DPCCH/DPDCH)

Figure 1 illustrates the principle of the uplink spreading of DPCCH and DPDCHs. The binary DPCCH and DPDCHs to be spread are represented by real-valued sequences, i.e. the binary value "0" is mapped to the real value +1, while the binary value "1" is mapped to the real value -1. The DPCCH is spread to the chip rate by the channelization code c_{ch} , while the n -th DPDCH called $DPDCH_n$ is spread to the chip rate by the channelization code $c_{ch,n}$. One DPCCH and up to six parallel DPDCHs can be transmitted simultaneously, i.e. $0 \leq n \leq 6$.

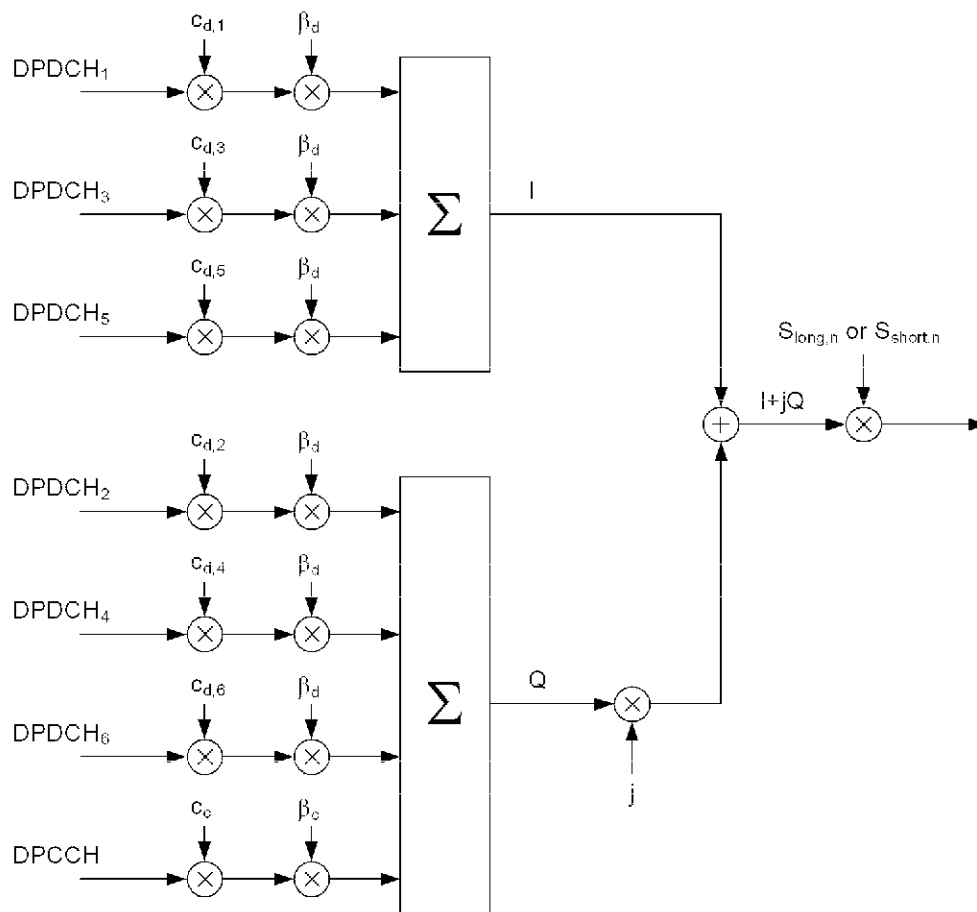


Figure 1: Spreading for uplink DPCCH and DPDCHs

After channelization, the real-valued spread signals are weighted by gain factors, β_c for DPCCH and β_d for all DPDCHs.

At every instant in time, at least one of the values β_c and β_d has the amplitude 1.0. The β -values are quantized into 4 bit words. The quantization steps are given in table 1.

Table 1: The quantization of the gain parameters

Signalling values for β_c and β_d	Quantized amplitude ratios β_c and β_d
15	1.0
14	0.9333
13	0.8666
12	0.8000
11	0.7333
10	0.6667
9	0.6000
8	0.5333
7	0.4667
6	0.4000
5	0.3333
4	0.2667
3	0.2000
2	0.1333
1	0.0667
0	Switch off

After the weighting, the stream of real-valued chips on the I- and Q-branches are then summed and treated as a complex-valued stream of chips. This complex-valued signal is then scrambled by the complex-valued scrambling code $S_{\text{long},n}$ or $S_{\text{short},n}$, depending on if long or short scrambling codes are used. The scrambling code is applied aligned with the radio frames, i.e. the first scrambling chip corresponds to the beginning of a radio frame.

4.2.2 PRACH

4.2.2.1 PRACH preamble part

The PRACH preamble part consist of a complex-valued code, described in section 4.3.3.

4.2.2.2 PRACH message part

Figure 2 illustrates the principle of the spreading and scrambling of the PRACH message part, consisting of data and control parts. The binary control and data parts to be spread are represented by real-valued sequences, i.e. the binary value "0" is mapped to the real value +1, while the binary value "1" is mapped to the real value -1. The control part is spread to the chip rate by the channelization code c_c , while the data part is spread to the chip rate by the channelization code c_d .

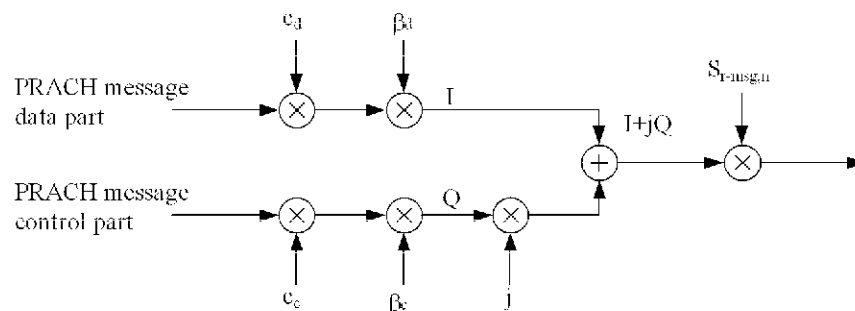


Figure 2: Spreading of PRACH message part

After channelization, the real-valued spread signals are weighted by gain factors, β_c for the control part and β_d for the data part. At every instant in time, at least one of the values β_c and β_d has the amplitude 1.0. The β -values are quantized into 4 bit words. The quantization steps are given in section 4.2.1.

After the weighting, the stream of real-valued chips on the I- and Q-branches are treated as a complex-valued stream of chips. This complex-valued signal is then scrambled by the complex-valued scrambling code $S_{\text{rmsg},n}$. The 10 ms scrambling code is applied aligned with the 10 ms message part radio frames, i.e. the first scrambling chip corresponds to the beginning of a message part radio frame.

4.2.3 PCPCH

4.2.3.1 PCPCH preamble part

The PCPCH preamble part consist of a complex-valued code, described in section 4.3.4.

4.2.3.2 PCPCH message part

Figure 3 illustrates the principle of the spreading of the PCPCH message part, consisting of data and control parts. The binary control and data parts to be spread are represented by real-valued sequences, i.e. the binary value "0" is mapped to the real value +1, while the binary value "1" is mapped to the real value -1. The control part is spread to the chip rate by the channelization code c_c , while the data part is spread to the chip rate by the channelization code c_d .

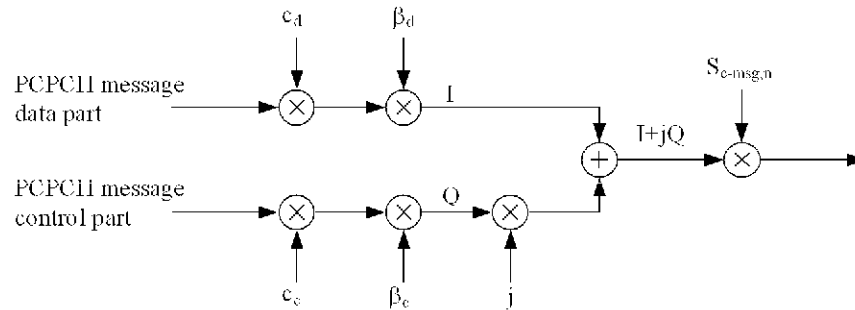


Figure 3: Spreading of PCPCH message part

After channelization, the real-valued spread signals are weighted by gain factors, β_c for the control part and β_d for the data part. At every instant in time, at least one of the values β_c and β_d has the amplitude 1.0. The β -values are quantized into 4 bit words. The quantization steps are given in section 4.2.1.

After the weighting, the stream of real-valued chips on the I- and Q-branches are treated as a complex-valued stream of chips. This complex-valued signal is then scrambled by the complex-valued scrambling code $S_{c\text{-msg},n}$. The 10 ms scrambling code is applied aligned with the 10 ms message part radio frames, i.e. the first scrambling chip corresponds to the beginning of a message part radio frame.

4.3 Code generation and allocation

4.3.1 Channelization codes

4.3.1.1 Code definition

The channelization codes of figure 1 are Orthogonal Variable Spreading Factor (OVSF) codes that preserve the orthogonality between a user's different physical channels. The OVSF codes can be defined using the code tree of figure 4.

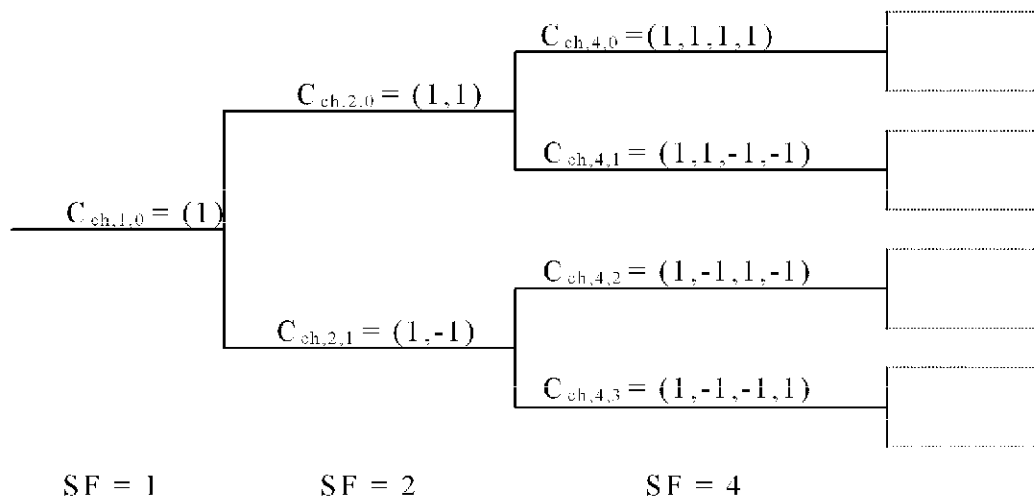


Figure 4: Code-tree for generation of Orthogonal Variable Spreading Factor (OVSF) codes

In figure 4, the channelization codes are uniquely described as $C_{ch,SF,k}$, where SF is the spreading factor of the code and k is the code number, $0 \leq k \leq SF-1$.

Each level in the code tree defines channelization codes of length SF , corresponding to a spreading factor of SF in figure 4.

The generation method for the channelization code is defined as

$$C_{ch,1,0} = 1,$$

$$\begin{bmatrix} C_{ch,2,0} \\ C_{ch,2,1} \end{bmatrix} = \begin{bmatrix} C_{ch,1,0} & C_{ch,1,0} \\ C_{ch,1,0} & -C_{ch,1,0} \end{bmatrix} = \begin{bmatrix} 1 & 1 \\ 1 & -1 \end{bmatrix}$$

$$\begin{bmatrix} C_{ch,2^{i+1},0} \\ C_{ch,2^{i+1},1} \\ C_{ch,2^{i+1},2} \\ C_{ch,2^{i+1},3} \\ \vdots \\ C_{ch,2^{i+1},2^{i+1}-2} \\ C_{ch,2^{i+1},2^{i+1}-1} \end{bmatrix} = \begin{bmatrix} C_{ch,2^i,0} & C_{ch,2^i,0} \\ C_{ch,2^i,0} & -C_{ch,2^i,0} \\ C_{ch,2^i,1} & C_{ch,2^i,1} \\ C_{ch,2^i,1} & -C_{ch,2^i,1} \\ \vdots & \vdots \\ C_{ch,2^i,2^{i-1}-1} & C_{ch,2^i,2^{i-1}-1} \\ C_{ch,2^i,2^{i-1}-1} & -C_{ch,2^i,2^{i-1}-1} \end{bmatrix}$$

The leftmost value in each channelization code word corresponds to the chip transmitted first in time.

4.3.1.2 Code allocation for DPCCCH/DPDCH

For the DPCCCH and DPDCHs the following applies:

- The DPCCCH is always spread by code $c_c = C_{ch,256,0}$.
- When only one DPDCH is to be transmitted, $DPDCH_1$ is spread by code $c_{d,1} = C_{ch,SF,k}$ where SF is the spreading factor of $DPDCH_1$ and $k = SF / 4$.
- When more than one DPDCH is to be transmitted, all DPDCHs have spreading factors equal to 4. $DPDCH_n$ is spread by the code $c_{d,n} = C_{ch,4,k}$, where $k = 1$ if $n \in \{1, 2\}$, $k = 3$ if $n \in \{3, 4\}$, and $k = 2$ if $n \in \{5, 6\}$.

In case of USTS, for the DPCCCH, the UTRAN assigns a node number v_c ($0 \leq v_c \leq 255$) in the code-tree that corresponds to a channelization code of length 256. For a DPDCH, the UTRAN assigns a node number v_d ($0 \leq v_d \leq L-1$) in the code-tree that corresponds to a channelization code of length L (i.e., SF for the UE). The sub-tree below the assigned node is used for spreading of DPDCH. When more than one DPDCH is to be transmitted, all DPDCHs have spreading factors equal to 4. In this case, the UTRAN assigns node numbers v_{d1} , v_{d2} , and v_{d3} ($0 \leq v_{d1}$, v_{d2} , and $v_{d3} \leq 3$) that correspond to channelization codes of length 4. The DPCCCH is always spread by code $C_{ch,0} = C_{ch,256,k}$, where $k = v_c$.

- When only one DPDCH is to be transmitted, $DPDCH_1$ is spread by code $C_{ch,SF,k}$, where SF is the spreading factor of $DPDCH_1$ and $k = v_d * SF / L$.
- When more than one DPDCH is to be transmitted, all DPDCHs have spreading factors equal to 4 (i.e., $L=4$). $DPDCH_n$ is spread by the code $C_{ch,n} = C_{ch,4,k}$, where $k = v_{d1}$ if $n \in \{1, 2\}$, $k = v_{d2}$ if $n \in \{3, 4\}$, and $k = v_{d3}$ if $n \in \{5, 6\}$.

4.3.1.3 Code allocation for PRACH message part

The preamble signature s , $1 \leq s \leq 16$, points to one of the 16 nodes in the code-tree that corresponds to channelization codes of length 16. The sub-tree below the specified node is used for spreading of the message part. The control part is spread with the channelization code c_c (as shown in section 4.2.2.2) of spreading factor 256 in the lowest branch of the sub-tree, i.e. $c_c = C_{ch,256,m}$ where $m = 16(s-1) + 15$. The data part uses any of the channelization codes from spreading factor 32 to 256 in the upper-most branch of the sub-tree. To be exact, the data part is spread by channelization code $c_d = C_{ch,SF,m}$ and SF is the spreading factor used for the data part and $m = SF \times (s-1) / 16$.

4.3.1.4 Code allocation for PCPCH message part

The signature in the preamble specifies one of the 16 nodes in the code-tree that corresponds to channelization codes of length 16. The sub-tree below the specified node is used for spreading of the message part. The control part is always spread with a channelization code of spreading factor 256. The code is chosen from the lowest branch of the sub-tree. The data part may use channelization codes from spreading factor 4 to 256. A UE is allowed to increase its spreading factor during the message transmission by choosing any channelization code from the uppermost branch of the sub-tree.

code. For channelization codes with spreading factors less than 16, the node is located on the same sub-tree as the channelization code of the access preamble

4.3.1.5 Channelisation code for PCPCH power control preamble

The channelisation code for the PCPCH power control preamble is the same as that used for the control part of the message part, as described in section 4.3.1.4 above.

4.3.2 Scrambling codes

4.3.2.1 General

All uplink physical channels are subjected to scrambling with a complex-valued scrambling code. The DPCCCH/DPDCCCH may be scrambled by either long or short scrambling codes, defined in section 4.3.2.4. The PRACH message part is scrambled with a long scrambling code, defined in section 4.3.2.5. Also the PCPCH message part is scrambled with a long scrambling code, defined in section 4.3.2.6.

There are 2^{24} long and 2^{24} short uplink scrambling codes. Uplink scrambling codes are assigned by higher layers.

The long scrambling code is built from constituent long sequences defined in section 4.3.2.2, while the constituent short sequences used to build the short scrambling code are defined in section 4.3.2.3.

4.3.2.2 Long scrambling sequence

The long scrambling sequences $c_{\text{long},1,n}$ and $c_{\text{long},2,n}$ are constructed from position wise modulo 2 sum of 38400 chip segments of two binary m -sequences generated by means of two generator polynomials of degree 25. Let x , and y be the two m -sequences respectively. The x sequence is constructed using the primitive (over GF(2)) polynomial $X^{25} + X^3 + 1$. The y sequence is constructed using the polynomial $X^{25} + X^3 + X^2 + X + 1$. The resulting sequences thus constitute segments of a set of Gold sequences.

The sequence $c_{\text{long},2,n}$ is a 16777232 chip shifted version of the sequence $c_{\text{long},1,n}$.

Let $n_{23} \dots n_0$ be the 24 bit binary representation of the scrambling sequence number n with n_0 being the least significant bit. The x sequence depends on the chosen scrambling sequence number n and is denoted x_n in the sequel. Furthermore, let $x_n(i)$ and $y(i)$ denote the i -th symbol of the sequence x_n and y , respectively.

The m -sequences x_n and y are constructed as:

Initial conditions:

$$x_n(0)=n_0, x_n(1)=n_1, \dots, x_n(22)=n_{22}, x_n(23)=n_{23}, x_n(24)=1$$

$$y(0)=y(1)=\dots=y(23)=y(24)=1$$

Recursive definition of subsequent symbols:

$$x_n(i+25)=x_n(i+3)+x_n(i) \text{ modulo } 2, i=0, \dots, 2^{25}-27,$$

$$y(i+25)=y(i+3)+y(i+2)+y(i+1)+y(i) \text{ modulo } 2, i=0, \dots, 2^{25}-27.$$

Define the binary Gold sequence z_n by

$$z_n(i)=x_n(i)+y(i) \text{ modulo } 2, i=0, 1, 2, \dots, 2^{25}-2.$$

The real valued Gold sequence Z_n is defined by

$$Z_n(i)=\begin{cases} +1 & \text{if } z_n(i)=0 \\ -1 & \text{if } z_n(i)=1 \end{cases} \text{ for } i=0, 1, \dots, 2^{25}-2.$$

Now, the real-valued long scrambling sequences $c_{\text{long},1,n}$ and $c_{\text{long},2,n}$ are defined as follows:

$c_{\text{long},1,n}(i) = Z_n(i)$, $i = 0, 1, 2, \dots, 2^{25} - 2$ and

$c_{\text{long},2,n}(i) = Z_n((i + 16777232) \text{ modulo } (2^{25} - 1))$, $i = 0, 1, 2, \dots, 2^{25} - 2$.

Finally, the complex-valued long scrambling sequence $C_{\text{long},n}$ is defined as

$$C_{\text{long},n}(i) = c_{\text{long},1,n}(i) \left(1 + j(-1)^i c_{\text{long},2,n}(\lfloor i/2 \rfloor) \right)$$

where $i = 0, 1, \dots, 2^{25} - 2$ and $\lfloor \cdot \rfloor$ denotes rounding to nearest lower integer

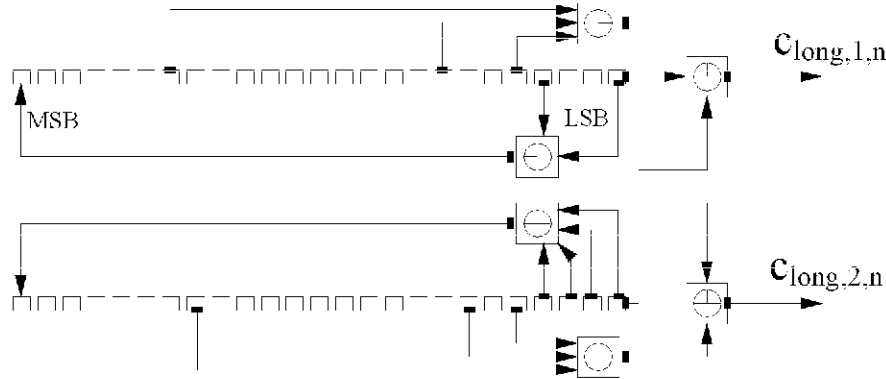


Figure 5: Configuration of uplink scrambling sequence generator

4.3.2.3 Short scrambling sequence

The short scrambling sequences $c_{\text{short},1,n}(i)$ and $c_{\text{short},2,n}(i)$ are defined from a sequence from the family of periodically extended S(2) codes.

Let $n_{23}n_{22}\dots n_0$ be the 24 bit binary representation of the code number n .

The n :th quaternary S(2) sequence $z_n(i)$, $0 \leq n \leq 16777215$, is obtained by modulo 4 addition of three sequences, a quaternary sequence $a(i)$ and two binary sequences $b(i)$ and $d(i)$, where the initial loading of the three sequences is determined from the code number n . The sequence $z_n(i)$ of length 255 is generated according to the following relation:

$$z_n(i) = a(i) + 2b(i) + 2d(i) \text{ modulo } 4, i = 0, 1, \dots, 254,$$

where the quaternary sequence $a(i)$ is generated recursively by the polynomial $g_0(x) = x^8 + x^5 + 3x^3 + x^2 + 2x + 1$ as

$$a(0) = 2n_0 + 1 \text{ modulo } 4,$$

$$a(i) = 2n_i \text{ modulo } 4, i = 1, 2, \dots, 7,$$

$$a(i) = 3a(i-3) + a(i-5) + 3a(i-6) + 2a(i-7) + 3a(i-8) \text{ modulo } 4, i = 8, 9, \dots, 254,$$

and the binary sequence $b(i)$ is generated recursively by the polynomial $g_1(x) = x^8 - x^7 + x^5 + x - 1$ as

$$b(i) = n_{8+i} \text{ modulo } 2, i = 0, 1, \dots, 7,$$

$$b(i) = b(i-1) + b(i-3) + b(i-7) + b(i-8) \text{ modulo } 2, i = 8, 9, \dots, 254,$$

and the binary sequence $c(i)$ is generated recursively by the polynomial $g_2(x) = x^8 - x^7 - x^5 - x^4 + 1$ as

$$d(i) = n_{16+i} \text{ modulo } 2, i = 0, 1, \dots, 7,$$

$$d(i) = d(i-1) + d(i-3) + d(i-4) + d(i-8) \text{ modulo } 2, i = 8, 9, \dots, 254.$$

The sequence $z_n(i)$ is extended to length 256 chips by setting $z_n(255) = z_n(0)$.

The mapping from $z_n(i)$ to the real-valued binary sequences $c_{\text{short},1,n}(i)$ and $c_{\text{short},2,n}(i)$, $i = 0, 1, \dots, 255$ is defined in Table 2.

Table 2. Mapping from $z_n(i)$ to $c_{short,1,n}(i)$ and $c_{short,2,n}(i)$, $i = 0, 1, \dots, 255$.

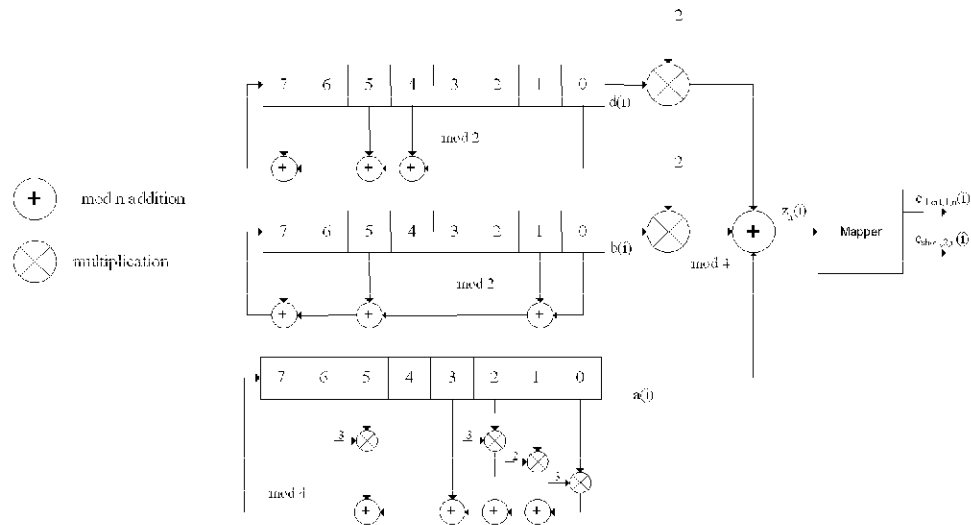
$z_n(i)$	$c_{short,1,n}(i)$	$c_{short,2,n}(i)$
0	+1	+1
1	-1	+1
2	-1	-1
3	+1	-1

Finally, the complex-valued short scrambling sequence $C_{short,n}$ is defined as

$$C_{short,n}(i) = c_{short,1,n}(i \bmod 256) \left(1 + j(-1)^i c_{short,2,n}(2 \lfloor (i \bmod 256) / 2 \rfloor) \right)$$

where $i = 0, 1, 2, \dots$ and $\lfloor \cdot \rfloor$ denotes rounding to nearest lower integer.

An implementation of the short scrambling sequence generator for the 255 chip sequence to be extended by one chip is shown in Figure 6.

**Figure 6. Uplink short scrambling sequence generator for 255 chip sequence.**

4.3.2.4 DPCCH/DPDCH scrambling code

The code used for scrambling of the uplink DPCCH/DPDCH may be of either long or short type. When the scrambling code is formed, different constituent codes are used for the long and short type as defined below

The n -th long uplink scrambling code for DPCCH/DPDCH, denoted $S_{long,n}$ is defined as

$$S_{long,n}(i) = C_{long,n}(i), \quad i = 0, 1, \dots, 38399,$$

where the lowest index corresponds to the chip transmitted first in time and $C_{long,n}$ is defined in section 4.3.2.2

The n -th short uplink scrambling code for DPCCH/DPDCH, denoted $S_{short,n}$ is defined as

$$S_{short,n}(i) = C_{short,n}(i), \quad i = 0, 1, \dots, 38399,$$

where the lowest index corresponds to the chip transmitted first in time and $C_{short,n}$ is defined in section 4.3.2.3.

4.3.2.5 PRACH message part scrambling code

The scrambling code used for the PRACH message part is 10 ms long, cell-specific and has a one-to-one correspondence to the scrambling code used for the preamble part.

The n -th PRACH message part scrambling code, denoted $S_{rmsg,n}$ is based on the long scrambling sequence and is defined as

$$S_{\text{T-msg},n}(i) = C_{\text{long},n}(i + 4096), \quad i = 0, 1, \dots, 38399$$

where the lowest index corresponds to the chip transmitted first in time and $C_{\text{long},n}$ is defined in section 4.3.2.2

4.3.2.6 PCPCH message part scrambling code

The set of scrambling codes used for the PCPCH message part are 10 ms long, cell-specific and have a one-to-one correspondence to the signature sequences and the access sub-channels used by the access preamble part. Both long or short scrambling codes can be used to scramble the PCPCH message part.

The n th PCPCH message part scrambling code, denoted $S_{\text{c-msg},n}$, is based on the scrambling sequence and is defined as

In the case when the long scrambling codes are used,

$$S_{\text{T-msg},n}(i) = C_{\text{long},n}(i + 8192), \quad i = 0, 1, \dots, 38399$$

where the lowest index corresponds to the chip transmitted first in time and $C_{\text{long},n}$ is defined in section 4.3.2.2

In the case when the access resources are shared between the RACH and PCPCH, then $S_{\text{c-msg},n}$ is defined as

$$S_{\text{T-msg},n}(i) = C_{\text{long},n}(i + 4096), \quad i = 0, 1, \dots, 38399$$

where the lowest index corresponds to the chip transmitted first in time and $C_{\text{long},n}$ is defined in section 4.3.2.2.

In the case the short scrambling codes are used,

$$S_{\text{T-msg},n}(i) = C_{\text{short},n}(i), \quad i = 0, 1, \dots, 38399$$

4.2.3.7 PCPCH power control preamble scrambling code

The scrambling code for the PCPCH power control preamble is the same as for the PCPCH message part, as described in section 4.2.3.6 above. The phase of the scrambling code shall be such that the end of the code is aligned with the frame boundary at the end of the power control preamble.

4.3.3 PRACH preamble codes

4.3.3.1 Preamble code construction

The random access preamble code $C_{\text{pre},n}$ is a complex valued sequence. It is built from a preamble scrambling code $S_{\text{pre},n}$ and a preamble signature $C_{\text{sig},s}$ as follows:

$$C_{\text{pre},n}(k) = S_{\text{pre},n}(k) \times C_{\text{sig},s}(k) \times e^{j\left(\frac{\pi}{4} + \frac{\pi}{2}k\right)}, \quad k = 0, 1, 2, 3, \dots, 4095,$$

where $k=0$ corresponds to the chip transmitted first in time and $S_{\text{pre},n}$ and $C_{\text{sig},s}$ are defined in 4.3.3.2 and 4.3.3.3 below respectively.

4.3.3.2 Preamble scrambling code

The scrambling code for the PRACH preamble part is constructed from the long scrambling sequences.

The n th preamble scrambling code is defined as:

$$S_{\text{T-pre},n}(i) = c_{\text{long},1,n}(i), \quad i = 0, 1, \dots, 4095,$$

where the sequence $c_{\text{long},1,n}$ is defined in section 4.3.2.2.

4.3.3.3 Preamble signature

The preamble signature corresponding to a signature s consists of 256 repetitions of a length 16 signature $P_s(n)$, $n=0 \dots 15$. This is defined as follows:

$$C_{\text{sig},s}(i) = P_s(i \text{ modulo } 16), \quad i = 0, 1, \dots, 4095.$$

The signature $P_s(n)$ is from the set of 16 Hadamard codes of length 16. These are listed in table 3.

Table 3: Preamble signatures

Preamble signature	Value of n															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
$P_0(n)$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$P_1(n)$	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1
$P_2(n)$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1
$P_3(n)$	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1
$P_4(n)$	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1
$P_5(n)$	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1
$P_6(n)$	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1
$P_7(n)$	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1
$P_8(n)$	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1
$P_9(n)$	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1	-1	1
$P_{10}(n)$	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1
$P_{11}(n)$	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1
$P_{12}(n)$	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1
$P_{13}(n)$	1	-1	1	-1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1
$P_{14}(n)$	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1
$P_{15}(n)$	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1

4.3.4 PCPCH preamble codes

4.3.4.1 Access preamble

4.3.4.1.1 Access preamble code construction

Similar to PRACH access preamble codes, the PCPCH access preamble codes $C_{c\text{-acc},n,s}$ are complex valued sequences. The PCPCH access preamble codes are built from the preamble scrambling codes $S_{c\text{-acc},n}$ and a preamble signature $C_{\text{sig},s}$ as follows:

$$C_{c\text{-acc},n,s}(k) = S_{c\text{-acc},n}(k) \times C_{\text{sig},s}(k) \times e^{j\left(\frac{\pi}{4} + \frac{\pi}{2}k\right)}, k = 0, 1, 2, 3, \dots, 4095,$$

where $S_{c\text{-acc},n}$ and $C_{\text{sig},s}$ are defined in section 4.3.4.1.2 and 4.3.4.1.3 below respectively.

4.3.4.1.2 Access preamble scrambling code

The access preamble scrambling code generation is done in a way similar to that of PRACH

The n -th PCPCH access preamble scrambling code is defined as:

$$S_{c\text{-acc},n}(i) = c_{\text{long},1,n}(i), i = 0, 1, \dots, 4095,$$

where the sequence $c_{\text{long},1,n}$ is defined in section 4.3.2.2.

In the case when the access resources are shared between the PRACH and PCPCH, the scrambling codes used in the PRACH preamble are used for the PCPCH preamble as well.

4.3.4.1.3 Access preamble signature

The access preamble part of the CPCH-access burst carries one of the sixteen different orthogonal complex signatures identical to the ones used by the preamble part of the random-access burst.

4.3.4.2 CD preamble

4.3.4.2.1 CD preamble code construction

Similar to PRACH access preamble codes, the PCPCH CD preamble codes $C_{c\text{-cd},n,s}$ are complex valued sequences. The PCPCH CD preamble codes are built from the preamble scrambling codes $S_{c\text{-cd},n}$ and a preamble signature $C_{\text{sig},s}$ as follows:

$$C_{c\text{-cd},n,s}(k) = S_{c\text{-cd},n}(k) \times C_{\text{sig},s}(k) \times e^{j\left(\frac{\pi}{4} + \frac{\pi}{2}k\right)}, k = 0, 1, 2, 3, \dots, 4095,$$

where $S_{c\text{-}cd,n}$ and $C_{sig,s}$ are defined in sections 4.3.4.2.2 and 4.3.4.2.3 below respectively.

4.3.4.2.2 CD preamble scrambling code

The PCPCH CD preamble scrambling code is derived from the same scrambling code used in the CPCH access preamble

The n -th PCPCH CD access preamble scrambling code is defined as:

$$S_{c\text{-}cd,n}(i) = c_{\text{long},1,n}(i + 4096), i = 0, 1, \dots, 4095,$$

where the sequence $c_{\text{long},1,n}$ is defined in section 4.3.2.2.

In the case when the access resources are shared between the RACH and CPCH, the scrambling codes used in the RACH preamble will be used for the CPCH CD preamble as well.

4.3.4.2.3 CD preamble signature

The CD-preamble part of the CPCH-access burst carries one of sixteen different orthogonal complex signatures identical to the ones used by the preamble part of the random-access burst.

4.4 Modulation

4.4.1 Modulating chip rate

The modulating chip rate is 3.84 Mcps.

4.4.2 Modulation

In the uplink, the complex-valued chip sequence generated by the spreading process is QPSK modulated as shown in Figure 7 below.

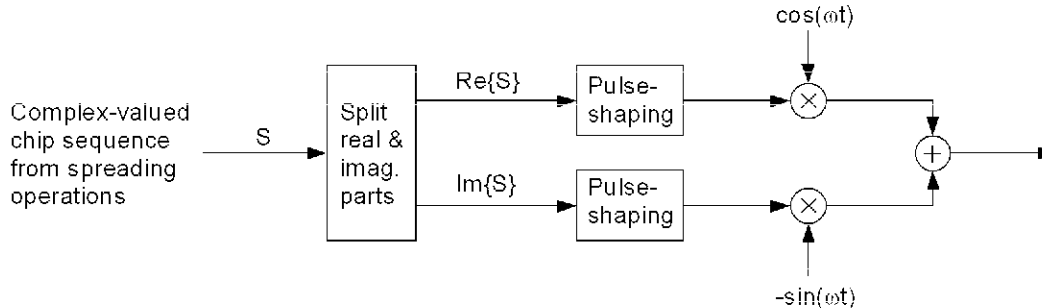


Figure 7: Uplink modulation.

The pulse-shaping characteristics are described in [3].

5 Downlink spreading and modulation

5.1 Spreading

Figure 8 illustrates the spreading operation for all downlink physical channels except SCH, i.e. for P-CCPCH, S-CCPCH, CPICH, AICH, PICH, and downlink DPCH. The non-spread physical channel consists of a sequence of real-valued symbols. For all channels except AICH, the symbols can take the three values +1, -1, and 0, where 0 indicates DTX. For AICH, the symbol values depend on the exact combination of acquisition indicators to be transmitted, compare [2] Section 5.3.3.6.

Each pair of two consecutive symbols is first serial-to-parallel converted and mapped to an I and Q branch. The mapping is such that even and odd numbered symbols are mapped to the I and Q branch respectively. For all channels except AICH, symbol number zero is defined as the first symbol in each frame. For AICH, symbol number zero is

defined as the first symbol in each access slot. The I and Q branches are then spread to the chip rate by the same real-valued channelization code $C_{ch, SF, dl}$. The sequences of real-valued chips on the I and Q branch are then treated as a single complex-valued sequence of chips. This sequence of chips is scrambled (complex chip-wise multiplication) by a complex-valued scrambling code $S_{dl, ul}$. In case of P-CCPCH, the scrambling code is applied aligned with the P-CCPCH frame boundary, i.e. the first complex chip of the spread P-CCPCH frame is multiplied with chip number zero of the scrambling code. In case of other downlink channels, the scrambling code is applied aligned with the scrambling code applied to the P-CCPCH. In this case, the scrambling code is thus not necessarily applied aligned with the frame boundary of the physical channel to be scrambled.

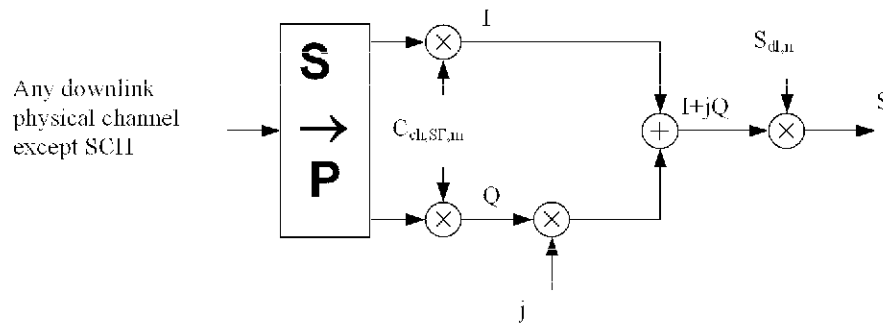


Figure 8: Spreading for all downlink physical channels except SCH

Figure 9 illustrates how different downlink channels are combined. Each complex-valued spread channel, corresponding to point S in Figure 8, is separately weighted by a weight factor G_p . The complex-valued P-SCH and S-SCH, as described in [1], section 5.3.3.4, are separately weighted by weight factors G_p and G_s . All downlink physical channels are then combined using complex addition.

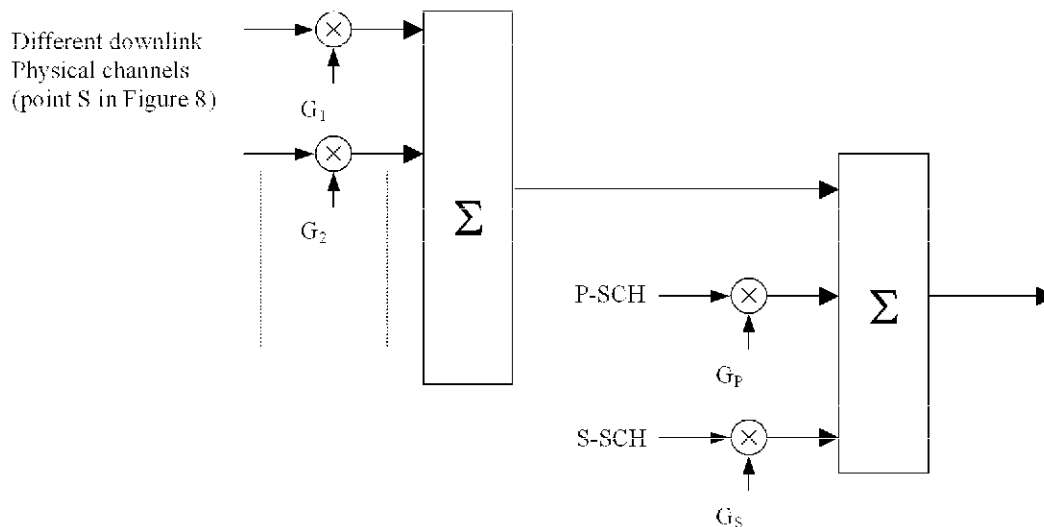


Figure 9: Spreading and modulation for SCH and P-CCPCH

5.2 Code generation and allocation

5.2.1 Channelization codes

The channelization codes of figure 8 are the same codes as used in the uplink, namely Orthogonal Variable Spreading Factor (OVSF) codes that preserve the orthogonality between downlink channels of different rates and spreading factors. The OVSF codes are defined in figure 4 in section 4.3.1.

The channelization code for the Primary CPICH is fixed to $C_{ch,256,0}$ and the channelization code for the Primary CCPCH is fixed to $C_{ch,256,1}$. The channelization codes for all other physical channels are assigned by UTRAN.

With the spreading factor 512 a specific restriction is applied. When the code word $C_{ch,512,n}$, with $n=0,2,4,\dots,510$, is used in soft handover, then the code word $C_{ch,512,n+1}$ is not allocated in the Node Bs where timing adjustment is to be used. Respectively if $C_{ch,512,n}$, with $n=1,3,5,\dots,511$ is used, then the code word $C_{ch,512,n+1}$ is not allocated in the Node B where timing adjustment is to be used. This restriction shall not apply for the softer handover operation or in case UTRAN is synchronised to such a level that timing adjustments in soft handover are not used with spreading factor 512.

When compressed mode is implemented by reducing the spreading factor by 2, the OVSF code used for compressed frames is:

- $C_{ch,SF/2,n/2}$ if ordinary scrambling code is used
- $C_{ch,SF/2,n \bmod SF/2}$ if alternative scrambling code is used (see section 5.2.2)

where $C_{ch,SF,n}$ is the channelization code used for non-compressed frames.

In case the OVSF code on the PDSCH varies from frame to frame, the OVSF codes shall be allocated such a way that the OVSF code(s) below the smallest spreading factor will be from the branch of the code tree pointed by the smallest spreading factor used for the connection. This means that all the codes for UE for the PDSCH connection can be generated according to the OVSF code generation principle from smallest spreading factor code used by the UE on PDSCH.

In case of mapping the DSCH to multiple parallel PDSCHs, the same rule applies, but all of the branches identified by the multiple codes, corresponding to the smallest spreading factor, may be used for higher spreading factor allocation.

5.2.2 Scrambling code

A total of $2^{18}-1 = 262,143$ scrambling codes, numbered $0 \dots 262,142$ can be generated. However not all the scrambling codes are used. The scrambling codes are divided into 512 sets each of a primary scrambling code and 15 secondary scrambling codes.

The primary scrambling codes consist of scrambling codes $n=16*i$ where $i=0 \dots 511$. The i th set of secondary scrambling codes consists of scrambling codes $16*i+k$, where $k=1 \dots 15$.

There is a one-to-one mapping between each primary scrambling code and 15 secondary scrambling codes in a set such that i th primary scrambling code corresponds to i th set of scrambling codes.

Hence, according to the above, scrambling codes $k = 0, 1, \dots, 8191$ are used. Each of these codes are associated with a left alternative scrambling code and a right alternative scrambling code, that may be used for compressed frames. The left alternative scrambling code corresponding to scrambling code k is scrambling code number $k + 8192$, while the right alternative scrambling code corresponding to scrambling code k is scrambling code number $k + 16384$. The alternative scrambling codes can be used for compressed frames. In this case, the left alternative scrambling code is used if $n < SF/2$ and the right alternative scrambling code is used if $n \geq SF/2$, where $C_{ch,SF,n}$ is the channelization code used for non-compressed frames. The usage of alternative scrambling code for compressed frames is signalled by higher layers for each physical channel respectively.

The set of primary scrambling codes is further divided into 64 scrambling code groups, each consisting of 8 primary scrambling codes. The j th scrambling code group consists of primary scrambling codes $16*8*j+16*k$, where $j=0 \dots 63$ and $k=0 \dots 7$.

Each cell is allocated one and only one primary scrambling code. The primary CCPCH and primary CPICH are always transmitted using the primary scrambling code. The other downlink physical channels can be transmitted with either the primary scrambling code or a secondary scrambling code from the set associated with the primary scrambling code of the cell.

The mixture of primary scrambling code and secondary scrambling code for one CCTrCH is allowable.

The scrambling code sequences are constructed by combining two real sequences into a complex sequence. Each of the two real sequences are constructed as the position wise modulo 2 sum of 38400 chip segments of two binary m -sequences generated by means of two generator polynomials of degree 18. The resulting sequences thus constitute segments of a set of Gold sequences. The scrambling codes are repeated for every 10 ms radio frame. Let x and y be the two sequences respectively. The x sequence is constructed using the primitive (over GF(2)) polynomial $1 + X^7 + X^{18}$. The y sequence is constructed using the polynomial $1 + X^5 + X^7 + X^{10} + X^{15}$.

The sequence depending on the chosen scrambling code number n is denoted z_n in the sequel. Furthermore, let $x(i)$, $y(i)$ and $z_n(i)$ denote the i :th symbol of the sequence x , y , and z_n , respectively

The m -sequences x and y are constructed as:

Initial conditions:

x is constructed with $x(0)=1$, $x(1)=x(2)=\dots=x(16)=x(17)=0$

$y(0)=y(1)=\dots=y(16)=y(17)=1$

Recursive definition of subsequent symbols:

$x(i+18) = x(i+7) + x(i+1)$ modulo 2, $i=0, \dots, 2^{18}-20$,

$y(i+18) = y(i+10) + y(i+7) + y(i+5) + y(i)$ modulo 2, $i=0, \dots, 2^{18}-20$.

The n :th Gold code sequence z_n , $n=0, 1, 2, \dots, 2^{18}-2$, is then defined as

$z_n(i) = x(i+n)$ modulo $(2^{18}-1) + y(i)$ modulo 2, $i=0, \dots, 2^{18}-2$.

These binary sequences are converted to real valued sequences Z_n by the following transformation:

$$Z_n(i) = \begin{cases} +1 & \text{if } z_n(i) = 0 \\ -1 & \text{if } z_n(i) = 1 \end{cases} \quad \text{for } i = 0, 1, \dots, 2^{18}-2.$$

Finally, the n :th complex scrambling code sequence $S_{dl,n}$ is defined as:

$S_{dl,n}(i) = Z_n(i) + j Z_n((i+131072) \text{ modulo } (2^{18}-1))$, $i=0, 1, \dots, 38399$.

Note that the pattern from phase 0 up to the phase of 38399 is repeated.

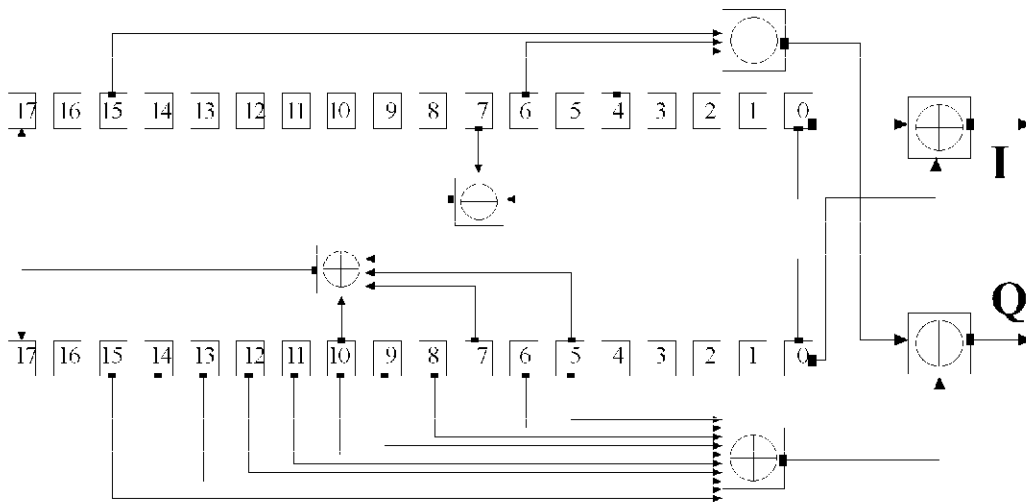


Figure 10: Configuration of downlink scrambling code generator

5.2.3 Synchronisation codes

5.2.3.1 Code generation

The primary synchronisation code (PSC), C_{psc} is constructed as a so-called generalised hierarchical Golay sequence. The PSC is furthermore chosen to have good aperiodic auto correlation properties.

Define

$$a = \langle x_1, x_2, x_3, \dots, x_{16} \rangle = \langle 1, 1, 1, 1, 1, 1, -1, -1, 1, -1, 1, -1, 1, -1, -1, 1 \rangle$$

The PSC is generated by repeating the sequence a modulated by a Golay complementary sequence, and creating a complex-valued sequence with identical real and imaginary components. The PSC C_{psc} is defined as

$$C_{psc} = (1 + j) \times \langle a, a, a, -a, -a, a, -a, -a, a, a, a, -a, a, -a, a, a \rangle,$$

where the leftmost chip in the sequence corresponds to the chip transmitted first in time

The 16 secondary synchronization codes (SSCs), $\{C_{ssc,1}, \dots, C_{ssc,16}\}$, are complex-valued with identical real and imaginary components, and are constructed from position wise multiplication of a Hadamard sequence and a sequence z , defined as

$$z = \langle b, b, b, -b, b, b, -b, -b, b, -b, -b, -b, -b, -b, -b \rangle, \text{ where}$$

$$b = \langle x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_8, -x_9, -x_{10}, -x_{11}, -x_{12}, -x_{13}, -x_{14}, -x_{15}, -x_{16} \rangle.$$

The Hadamard sequences are obtained as the rows in a matrix H_S constructed recursively by

$$H_0 = (1)$$

$$H_k = \begin{pmatrix} H_{k-1} & H_{k-1} \\ H_{k-1} & -H_{k-1} \end{pmatrix}, \quad k \geq 1$$

The rows are numbered from the top starting with row 0 (the all ones sequence).

Denote the n th Hadamard sequence as a row of H_S numbered from the top, $n = 0, 1, 2, \dots, 255$, in the sequel.

Furthermore, let $h_n(i)$ and $z(i)$ denote the i th symbol of the sequence h_n and z , respectively where $i = 0, 1, 2, \dots, 255$ and $i = 0$ corresponds to the leftmost symbol.

The k th SSC, $C_{ssc,k}$, $k = 1, 2, 3, \dots, 16$ is then defined as

$$C_{ssc,k} = (1 + j) \times \langle h_m(0) \times z(0), h_m(1) \times z(1), h_m(2) \times z(2), \dots, h_m(255) \times z(255) \rangle,$$

where $m = 16 \times (k - 1)$ and the leftmost chip in the sequence corresponds to the chip transmitted first in time.

5.2.3.2 Code allocation of SSC

The 64 secondary SCH sequences are constructed such that their cyclic-shifts are unique, i.e., a non-zero cyclic shift less than 15 of any of the 64 sequences is not equivalent to some cyclic shift of any other of the 64 sequences. Also, a non-zero cyclic shift less than 15 of any of the sequences is not equivalent to itself with any other cyclic shift less than 15. Table 4 describes the sequences of SSCs used to encode the 64 different scrambling code groups. The entries in table 4 denote what SSC to use in the different slots for the different scrambling code groups, e.g. the entry "7" means that SSC $C_{ssc,7}$ shall be used for the corresponding scrambling code group and slot

Table 4: Allocation of SSCs for secondary SCH.

Scrambling Code Group	slot number														
	#0	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14
Group 1	1	1	2	8	9	10	15	8	10	16	2	7	15	7	16
Group 2	1	1	5	16	7	3	14	16	3	10	5	12	14	12	10
Group 3	1	2	1	15	5	5	12	16	6	11	2	16	11	15	12
Group 4	1	2	3	1	8	6	5	2	5	8	4	4	6	3	7
Group 5	1	2	16	6	6	11	15	5	12	1	15	12	16	11	2
Group 6	1	3	4	7	4	1	5	5	3	6	2	8	7	6	8
Group 7	1	4	11	3	4	10	9	2	11	2	10	12	12	9	3
Group 8	1	5	6	6	14	9	10	2	13	9	2	5	14	1	13
Group 9	1	6	10	10	4	11	7	13	16	11	13	6	4	1	16
Group 10	1	6	13	2	14	2	6	5	5	13	10	9	1	14	10
Group 11	1	7	8	5	7	2	4	3	8	3	2	6	6	4	5
Group 12	1	7	10	9	16	7	9	15	1	8	16	8	15	2	2
Group 13	1	8	12	9	9	4	13	16	5	1	13	5	12	4	8
Group 14	1	8	14	10	14	1	15	15	8	5	11	4	10	5	4
Group 15	1	9	2	15	15	16	10	7	8	1	10	8	2	16	9
Group 16	1	9	15	6	16	2	13	14	10	11	7	4	5	12	3
Group 17	1	10	9	11	15	7	6	4	16	5	2	12	13	3	14
Group 18	1	11	14	4	13	2	9	10	12	16	8	5	3	15	6
Group 19	1	12	12	13	14	7	2	8	14	2	1	13	11	8	11
Group 20	1	12	15	5	4	14	3	16	7	8	6	2	10	11	13
Group 21	1	15	4	3	7	6	10	13	12	5	14	16	8	2	11
Group 22	1	16	3	12	11	9	13	5	8	2	14	7	4	10	15
Group 23	2	2	5	10	16	11	3	10	11	8	5	13	3	13	8
Group 24	2	2	12	3	15	5	8	3	5	14	12	9	8	9	14
Group 25	2	3	6	16	12	16	3	13	13	6	7	9	2	12	7
Group 26	2	3	8	2	9	15	14	3	14	9	5	5	15	8	12
Group 27	2	4	7	9	5	4	9	11	2	14	5	14	11	16	16
Group 28	2	4	13	12	12	7	15	10	5	2	15	5	13	7	4
Group 29	2	5	9	9	3	12	8	14	15	12	14	5	3	2	15
Group 30	2	5	11	7	2	11	9	4	16	7	16	9	14	14	4
Group 31	2	6	2	13	3	3	12	9	7	16	6	9	16	13	12
Group 32	2	6	9	7	7	16	13	3	12	2	13	12	9	16	6
Group 33	2	7	12	15	2	12	4	10	13	15	13	4	5	5	10
Group 34	2	7	14	16	5	9	2	9	16	11	11	5	7	4	14
Group 35	2	8	5	12	5	2	14	14	8	15	3	9	12	15	9
Group 36	2	9	13	4	2	13	8	11	6	4	6	8	15	15	11
Group 37	2	10	3	2	13	16	8	10	8	13	11	11	16	3	5
Group 38	2	11	15	3	11	6	14	10	15	10	6	7	7	14	3
Group 39	2	16	4	5	16	14	7	11	4	11	14	9	9	7	5
Group 40	3	3	4	6	11	12	13	6	12	14	4	5	13	5	14
Group 41	3	3	6	5	16	9	15	5	9	10	6	4	15	4	10
Group 42	3	4	5	14	4	6	12	13	5	13	6	11	11	12	14
Group 43	3	4	9	16	10	4	16	15	3	5	10	5	15	6	6
Group 44	3	4	16	10	5	10	4	9	9	16	15	6	3	5	15
Group 45	3	5	12	11	14	5	11	13	3	6	14	6	13	4	4
Group 46	3	6	4	10	6	5	9	15	4	15	5	16	16	9	10
Group 47	3	7	8	8	16	11	12	4	15	11	4	7	16	3	15
Group 48	3	7	16	11	4	15	3	15	11	12	12	4	7	8	16
Group 49	3	8	7	15	4	8	15	12	3	16	4	16	12	11	11
Group 50	3	8	15	4	16	4	8	7	7	15	12	11	3	16	12

Scrambling Code Group	slot number														
	#0	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14
Group 51	3	10	10	15	16	5	4	6	16	4	3	15	9	6	9
Group 52	3	13	11	5	4	12	4	11	6	6	5	3	14	13	12
Group 53	3	14	7	9	14	10	13	8	7	8	10	4	4	13	9
Group 54	5	5	8	14	16	13	6	14	13	7	8	15	6	15	7
Group 55	5	6	11	7	10	8	5	8	7	12	12	10	6	9	11
Group 56	5	6	13	8	13	5	7	7	6	16	14	15	8	16	15
Group 57	5	7	9	10	7	11	6	12	9	12	11	8	8	6	10
Group 58	5	9	6	8	10	9	8	12	5	11	10	11	12	7	7
Group 59	5	10	10	12	8	11	9	7	8	9	5	12	6	7	6
Group 60	5	10	12	6	5	12	8	9	7	6	7	8	11	11	9
Group 61	5	13	15	15	14	8	6	7	16	8	7	13	14	5	16
Group 62	9	10	13	10	11	15	15	9	16	12	14	13	16	14	11
Group 63	9	11	12	15	12	9	13	13	11	14	10	16	15	14	16
Group 64	9	12	10	15	13	14	9	14	15	11	11	13	12	16	10

5.3 Modulation

5.3.1 Modulating chip rate

The modulating chip rate is 3.84 Mcps.

5.3.2 Modulation

In the downlink, the complex-valued chip sequence generated by the spreading process is QPSK modulated as shown in Figure 11 below

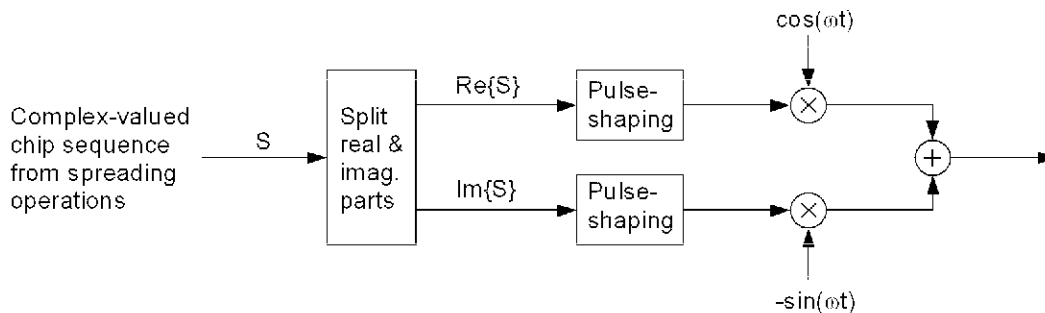


Figure 11: Downlink modulation.

The pulse-shaping characteristics are described in [4].

Annex A (informative): Generalised Hierarchical Golay Sequences

A.1 Alternative generation

The generalised hierarchical Golay sequences for the PSC described in 5.2.3.1 may be also viewed as generated (in real valued representation) by the following methods:

Method 1.

The sequence y is constructed from two constituent sequences x_1 and x_2 of length n_1 and n_2 respectively using the following formula:

$$y(i) = x_2(i \bmod n_2) * x_1(i \div n_2), i = 0 \dots (n_1 * n_2) - 1$$

The constituent sequences x_1 and x_2 are chosen to be the following length 16 (i.e. $n_1 = n_2 = 16$) sequences:

- x_1 is defined to be the length 16 ($N^{(1)}=4$) Golay complementary sequence obtained by the delay matrix $D^{(1)} = [8, 4, 1, 2]$ and weight matrix $W^{(1)} = [1, -1, 1, 1]$.
- x_2 is a generalised hierarchical sequence using the following formula, selecting $s=2$ and using the two Golay complementary sequences x_3 and x_4 as constituent sequences. The length of the sequence x_3 and x_4 is called n_3 respectively n_4 .

$$x_2(i) = x_4(i \bmod s + s * (i \div sn_3)) * x_3((i \div s) \bmod n_3), i = 0 \dots (n_3 * n_4) - 1$$

x_3 and x_4 are defined to be identical and the length 4 ($N^{(3)} = N^{(4)} = 2$) Golay complementary sequence obtained by the delay matrix $D^{(3)} = D^{(4)} = [1, 2]$ and weight matrix $W^{(3)} = W^{(4)} = [1, 1]$.

The Golay complementary sequences x_1, x_3 and x_4 are defined using the following recursive relation

$$a_0(k) = \delta(k) \text{ and } b_0(k) = \delta(k)$$

$$a_n(k) = a_{n-1}(k) + W^{(j)}_n b_{n-1}(k - D^{(j)}_n),$$

$$b_n(k) = a_{n-1}(k) - W^{(j)}_n b_{n-1}(k - D^{(j)}_n),$$

$$k = 0, 1, 2, \dots, 2 * N^{(j)} - 1,$$

$$n = 1, 2, \dots, N^{(j)}.$$

The wanted Golay complementary sequence x_j is defined by a_n assuming $n=N^{(j)}$. The Kronecker delta function is described by δ, k, j and n are integers.

Method 2

The sequence y can be viewed as a pruned Golay complementary sequence and generated using the following parameters which apply to the generator equations for a and b above:

(a) Let $j = 0, N^{(j)} = 8$

(b) $[D_1^{(0)}, D_2^{(0)}, D_3^{(0)}, D_4^{(0)}, D_5^{(0)}, D_6^{(0)}, D_7^{(0)}, D_8^{(0)}] = [128, 64, 16, 32, 8, 1, 4, 2]$

(c) $[W_1^{(0)}, W_2^{(0)}, W_3^{(0)}, W_4^{(0)}, W_5^{(0)}, W_6^{(0)}, W_7^{(0)}, W_8^{(0)}] = [1, -1, 1, 1, 1, 1, 1, 1]$

(d) For $n = 4, 6$, set $b_4(k) = a_4(k), b_6(k) = a_6(k)$.

Annex B (informative): Change history

Change history					
TSG RAN#	Version	CR	Tdoc RAN	New Version	Subject/Comment
RAN_05	-	-	RP-99589	3.0.0	Approved at TSG RAN #5 and placed under Change Control
RAN_06	3.0.0	005	RP-99682	3.1.0	Harmonization of notations for downlink scrambling codes
RAN_06	3.0.0	006	RP-99683	3.1.0	Update of downlink spreading description
RAN_06	3.0.0	007	RP-99682	3.1.0	Update of TS 25.213 uplink parts
RAN_06	3.0.0	008	RP-99683	3.1.0	Updated modulation description
RAN_06	3.0.0	009	RP-99683	3.1.0	Restriction for spreading factor 512 allocation in the UTRA FDD Downlink
RAN_06	3.0.0	011	RP-99683	3.1.0	CPCH codes in power control preamble
RAN_06	3.0.0	012	RP-99683	3.1.0	Support of short codes for CPCH
RAN_06	3.0.0	014	RP-99682	3.1.0	Editorial Change
RAN_06	3.0.0	016	RP-99683	3.1.0	Channelization Code Allocation for USTS
RAN_06	3.0.0	017	RP-99683	3.1.0	Correction (Editorial Change)
RAN_06	3.0.0	019	RP-99683	3.1.0	Correction to code allocation for compressed mode
-	3.1.0	-	-	3.1.1	Change history was added by the editor

History

Document history		

A5346 - 5705

REMOVED DUE TO CONFIDENTIAL MATERIAL

ETSI Guide on Intellectual Property Rights (IPRs)

Version adopted by Board #70 on 27 November 2008

Background

The ETSI IPR Policy was adopted by the 21st General Assembly on 23 November 1994 and incorporated in the ETSI Directives as Annex 6 to the ETSI Rules of Procedure.

At a later stage a Technical Body Chairman's Guide on IPRs had been written to help Chairmen and others involved in ETSI's standardization activities to understand and implement the Institute's IPR Policy. That Chairman's Guide on IPR had not been endorsed by the General Assembly or the Board and therefore did not have the same official status as the ETSI Statutes, the Rules of Procedure or the Technical Working procedures. The Technical Body Chairman's Guide on IPRs is now replaced by the present ETSI Guide on IPRs.

In 2002 the ETSI General Assembly #40 identified the need to review the ETSI IPR Policy with a view to addressing and rectifying any uncertainties on the operation of this Policy and on any legal rules and obligations on the membership in order to avoid an incorrect implementation of the ETSI IPR Policy and in order to avoid anti-competitive actions. An ad-hoc IPR group, with a clear mandate to review the implementation of the IPR Policy but not to change the Policy itself, was consequently created and 30 recommendations on the operation of the ETSI IPR Policy were approved by the ETSI General Assembly #42. The present ETSI Guide on IPRs embodies most of these recommendations.

A revised version of the Clause 4.1 of the ETSI IPR Policy was adopted by the 46th General Assembly in November 2005. This revision was induced by the EC DG COMPETITION in its concern to generate a general awareness of the risk of "patent ambush" situation in the standard making process. The EC DG COMPETITION rationale behind the changes is given in section 4.5 of the present Guide.

Foreword

Intellectual property plays an important role in standardization, especially in the telecommunications and electronic communications sector. In that context, the likelihood of having Intellectual Property Rights (IPRs) incorporated into ETSI Deliverables became critical after a few years of existence of ETSI. This tension (proprietary nature of IPRs versus wide dissemination of standards) was minimized with the adoption by the ETSI Membership of the ETSI IPR Policy as found in Annex 6 to the ETSI Rules of Procedure.

In the preparation of standards, IPR issues may arise. It is important for all parties involved in the ETSI standards-making process to be aware of their responsibilities and that there is good co-operation between all parties.

This guide is intended to help ETSI Members and any other party involved in ETSI's standardization activities (e.g. Members, Technical Body Chairmen, Secretariat, etc.) to understand and implement the Institute's IPR Policy.

This guide provides explanatory information on how to handle IPR matters in ETSI and does not replace the ETSI IPR Policy which takes precedence in all cases.

This guide has been endorsed by the Board but does not have the same official status as the Statutes, the Rules of Procedure or the Technical Working Procedures.

Should you (the reader) have any difficulty with provisions of this guide or with any practical aspects of the Policy which are not answered by this guide, please do not hesitate to contact the ETSI Secretariat (hereafter called simply "Secretariat").

1 The ETSI IPR Policy

1.1 What is the Purpose of the IPR Policy?

The purpose of the ETSI IPR Policy is to facilitate the standards making process within ETSI. In complying with the Policy the Technical Bodies should not become involved in legal discussion on IPR matters. The main characteristics of the Policy can be simplified as follows:

- Members are fully entitled to hold and benefit from any IPRs which they may own, including the right to refuse the granting of licenses.
- It is ETSI's objective to create Standards and Technical Specifications that are based on solutions which best meet the technical objectives of ETSI.
- In achieving this objective, the ETSI IPR Policy seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs.
- The IPR Policy seeks to reduce the risk that investment in the preparation, adoption and application of standards could be wasted as a result of an Essential IPR for a standard or technical specification being unavailable.
- Therefore, the knowledge of the existence of Essential IPRs is required as early as possible within the standards making process, especially in the case where licenses are not available under fair, reasonable and non-discriminatory (FRAND) terms and conditions.

The ETSI IPR Policy defines the rights and obligations for ETSI as an Institute, for its Members and for the Secretariat.

The Policy is intended to ensure that IPRs are identified in sufficient time to avoid wasting effort on the elaboration of a Deliverable which could subsequently be blocked by an Essential IPR.

1.2 Where can I find the ETSI IPR Policy?

The ETSI IPR Policy is part of the ETSI Directives and can be found in Annex 6 of the ETSI Rules of Procedures (<http://portal.etsi.org/Directives/home.asp>). This means that the rights and obligations specified by the IPR Policy are an integral part of the ETSI Rules of Procedure and are binding on all ETSI Members.

You can also find a copy of the Policy at Annex A.

1.3 Terminology

The ETSI IPR Policy defines a number of terms; those used in this guide correspond to those used in the Policy.

In the ETSI IPR Policy:

an IPR includes:

- COPYRIGHT
- PATENT
- UTILITY MODEL
- REGISTERED DESIGN
- ... and applications thereof.

an IPR does not include:

- TRADEMARKS
- TRADE SECRETS
- CONFIDENTIAL INFORMATION

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- RIGHTS RELATING TO GET-UP (packaging)

1.4 Rights and obligations deriving from the IPR Policy

The ETSI IPR POLICY defines rights and obligations for ETSI as an Institute, for its Members and for the Secretariat. Non-Members of ETSI also have certain rights under the Policy but do not have legal obligations.

The following table intends to give a clear overview of the most important rights and obligations of the Institute, the Members, the Secretariat and the rights of third parties as specified under the ETSI IPR Policy. *All references below which are in italics relate to the ETSI IPR Policy.*

	Obligations	Rights
Institute	<ul style="list-style-type: none"> • to inform users of standards about Essential IPRs declared and ensure that this information is publicly available (<i>Clause 7</i>). • to perform IPR searches if the EC and/or EFTA so require and reasonable expenses are met (<i>Clause 6.2</i>). • to grant licenses on ETSI-owned IPRs (other than copyright) on fair, reasonable and non-discriminatory terms and conditions to third parties, free of charge to ETSI Members (<i>Clause 9.3</i>). • to respect confidential information within a Technical Body until publication of the relevant Deliverable. • to include the information in a standard (<i>Clause 10</i>). 	
Members	<ul style="list-style-type: none"> • to inform ETSI about their own, and other people's Essential IPRs (<i>Clause 4.1</i>). • owners of Essential IPRs are requested to undertake to grant licenses on fair, reasonable and non-discriminatory terms and conditions (<i>Clause 6.1</i>). • owners of Essential IPRs who refuse to grant license when no alternative is available, are requested to reconsider their position and provide the Director-General with a justification (<i>Clause 8.1</i>). • to abstain from claiming copyright on standards documentation (text, graphics etc., of the standard itself) on behalf of the member itself and its employees (<i>Clause 9.1</i>). 	<ul style="list-style-type: none"> • no obligation to conduct IPR searches (<i>Clause 4.2</i>). • to refuse the inclusion of own IPRs in standards (<i>Clauses 8.1 and 8.2</i>). • to be granted licenses on fair, reasonable and non-discriminatory terms and conditions in respect of a standard (<i>Clause 6.1</i>). • to make copies of standards documentation (<i>Clause 11</i>) free of charge. • to use IPRs owned by ETSI free of charge (<i>Clause 9.3</i>). • to have confidential information within a Technical Body respected until publication of the relevant Deliverable (<i>Clause 10</i>).

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Secretariat	<ul style="list-style-type: none"> the Director-General to contact owners of Essential IPRs having refused to grant licenses on behalf of ETSI (<i>Clauses 8.1 and 8.2</i>). the Director-General to request the owner of an Essential IPR to give within three months an undertaking in writing that it is prepared to grant licenses (<i>Clause 6.1</i>). 	
Third Parties	<ul style="list-style-type: none"> the ETSI IPR Policy is only binding on ETSI Members. Third parties do not have any legal OBLIGATIONS under the Policy. when ETSI is informed that an IPR belonging to a non-Member could be essential for a standard, the non-Member owner is also requested to undertake to grant licenses on fair, reasonable and non-discriminatory terms and conditions (<i>Clause 6.1</i>). 	<ul style="list-style-type: none"> Third parties have certain RIGHTS under the ETSI IPR Policy either as owners of Essential IPRs or as users of ETSI standards or documentation: <ul style="list-style-type: none"> to refuse the inclusion of their own Essential IPRs in ETSI Deliverables (<i>Clause 8.1 and 8.2</i>). To be granted licenses on fair, reasonable and non-discriminatory terms and conditions in respect of a standard at least to manufacture, sell, lease, repair, use and operate, (<i>Clause 6.1</i>) to be granted licenses for ETSI owned IPRs (other than copyright in the standard documentation) (<i>Clause 9.3</i>) on fair, reasonable and non-discriminatory terms and conditions. to have confidential information within a Technical Body respected until publication of the relevant Deliverable (<i>Clause 10</i>).

1.5 "Essential" IPRs

Clause 15.6 of the ETSI IPR Policy gives the following definition of essentiality:

"15.6 *ESSENTIAL as applied to IPR means that it is not possible on technical (but not commercial) grounds, taking into account normal technical practice and the state of the art generally available at the time of standardization, to make, sell, lease, otherwise dispose of, repair, use or operate EQUIPMENT or METHODS which comply with a STANDARD without infringing that IPR. For the avoidance of doubt in exceptional cases where a STANDARD can only be implemented by technical solutions, all of which are infringements of IPRs, all such IPRs shall be considered ESSENTIAL.*

In simpler terms, an "essential IPR" is an IPR which has been included within a standard and where it would be impossible to implement the standard without making use of this IPR. The only way to avoid the violation of this IPR in respect of the implementation of the standard is therefore to request a license from the owner.

2 Importance of timely disclosure of Essential IPRs

The main problems for ETSI as a standards body which may arise from "late disclosures" include:

- Licenses for Patents which have been disclosed late and are not available at all, or,
- Licenses for Patents which have been disclosed late and which are available, but not on Fair, Reasonable and Non-Discriminatory (FRAND) terms, i.e. the company is unwilling to make a "FRAND" undertaking/licensing declaration.

If the above problems cannot be satisfactorily resolved, then ETSI has to change the standard, which in some extreme cases could even include the need to start again with the development of that standard.

NOTE 1: Definitions for "Timeliness" or "Timely" cannot be agreed because such definitions would constitute a "change to the Policy".

NOTE 2: The following description of Intentional Delay has been noted:

"Intentional Delay" has arisen when it can be demonstrated that an ETSI Member has deliberately withheld IPR disclosures significantly beyond what would be expected from normal considerations of "Timeliness".

This description of "Intentional Delay" should be interpreted in a way that is consistent with the current ETSI IPR Policy. In complying with the requirements of timeliness under Clause 4.1 of the IPR Policy, Members are recommended to make IPR disclosures at the earliest possible time following their becoming aware of IPRs which are, or are likely to become, Essential.

NOTE 3: "Intentional Delay", where proven, should be treated as a breach of the IPR Policy (Clause 14 of the ETSI IPR Policy) and can be sanctioned by the General Assembly.

2.1 Members Duties

2.1.1 Responding to Calls for IPRs performed in Technical Body meetings

Members participating in Technical Bodies should respond at the earliest possible time to the Call for IPRs performed by Technical Body Chairmen at the beginning of each meeting, based on the working knowledge of their participants.

Furthermore, the call for IPRs acts as a reminder of the Member's obligations under the IPR Policy and is performed to foster the disclosure of Essential IPRs in a timely fashion.

Members having IPR portfolios should improve their internal IPR co-ordination processes to ensure, as far as possible, that their participants in Technical Bodies are aware of any alleged-essential IPR the company may have (related to the on-going work on a particular ETSI Standard or Technical Specification), that they understand their obligations, and that they know how to discharge them.

Members are encouraged to make general IPR undertakings/licensing declarations that they will make licenses available for all their IPRs under FRAND terms and conditions related to a specific standardization area and then, as soon as feasible, provide (or refine) detailed disclosures. This process reduces the risk of the standards making process being blocked due to IPR constraints.

2.1.2 Disclosure and licensing of patents from a PATENT FAMILY

The deemed fulfilment in Clause 4.3 of the IPR Policy of the obligations pursuant to Clause 4.1 in respect of all existing and future members of a PATENT FAMILY is only applicable to the extent that the IPR owner has the right to make the IPR undertaking/licensing declaration pursuant to Clause 6.1

of the ETSI IPR Policy as to members of the PATENT FAMILY at the date of the IPR information statement and licensing declaration.

For the purpose of the disclosure made under Clause 4, the patent owner may consider any part of an IPR document, in particular the description, the claims and the drawings.

2.1.3 Use the ETSI IPR Licensing Declaration forms

The ETSI IPR Licensing Declaration forms consist of the (i) the IPR information statement and licensing declaration form, including its annexes, and (ii) the General IPR licensing declaration form:

- The *IPR information statement and licensing declaration* shall be submitted with the IPR information statement annex and, where applicable, together with the IPR licensing declaration annex to identify the specific IPRs which are applicable.
- The General *IPR licensing declaration* shall be used to give an undertaking to grant licenses under any IPR that are or become essential in respect of the identified STANDARD(S), TECHNICAL SPECIFICATION(S), or ETSI Project(s). It is submitted without the *IPR information statement annex* but, in accordance with Clause 4.1 of the ETSI IPR Policy, members should provide updates in a timely fashion via the *IPR information statement and licensing declaration* and the *IPR information statement annex*.

Use of the General IPR licensing declaration does not take away the obligation for members to declare essential patents to ETSI as stated in 2.1.1.

The ETSI *IPR Licensing Declaration forms* can be found at Annex 6 of the ETSI Rules of Procedure and online at:

<http://www.etsi.org/WebSite/document/Legal/IPRforms.doc>

These forms, once completed and duly signed should be returned to the ETSI Director-General.

Any questions related to the completion of the forms should be addressed to the ETSI Legal Affairs Director (legal@etsi.org).

2.1.4 Update and complete the ETSI IPR Information Statement form

Members are not obliged to inform ETSI of any updates to their essential IPRs. Nevertheless, Members are encouraged to update and complete their information statements in line with the forms (see Annex 6 of the ETSI Rules of Procedure). A minimum of information should be provided, which allows verifying the essentiality or the potential essentiality of an IPR.

2.1.5 Copyrights in ETSI Deliverables

Members should be aware that once a technical proposal has been included into ETSI documentation the copyright is owned by ETSI, for the purpose of the publication of ETSI documentation.

2.2 Members do NOT have a duty to:

- conduct IPR searches (see Clause 4.2 of the IPR Policy).
- disclose within the Technical Body the commercial terms for licenses for which they have undertaken to grant licenses under FRAND terms and conditions. Any such commercial terms are a matter for discussion between the IPR holder and the potential licensee, outside of ETSI (see section 4.1 of this Guide).

2.3 Technical Body Chairmen's duties

Chairmen represent the membership while having the authority to represent the Institute in their Technical Body. Chairmen have an important role in respect of both, the identification and disclosure

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of essential IPRs. They have a duty to remind the Members of their statutory obligations to submit IPR disclosures.

In addition to the actions aiming at the identification of IPRs, the Chairmen also need to take the following actions, which ensure that the disclosure of essential IPRs is properly carried out:

- to record in the report of the meeting that an IPR call has been made and to record any responses;
- to inform the Secretariat of the existence of any essential IPRs identified.

Also, Chairmen shall not allow any discussion on commercial issues in the Technical Body, in particular but not limited to discussions on details of specific licensing terms and conditions.

Finally, the Chairman should take care that the ETSI Guidelines for antitrust compliance are strictly observed.

Throughout the standardization process the Chairmen must take the actions as laid down in the following Sections of this Guide, which facilitate the identification of Essential IPRs.

2.3.1 Define scope statements for work items

It is vital that Chairmen ensure that the scope statements for all work items in the ETSI work programme are properly defined. This will ensure that if a search for patents is required (under Clause 6.3 of the Policy) or chosen to be performed by a Member, the task can be carried out in the most effective manner.

In order that the scope statement of an ETSI work item can be used for IPR purposes, it should contain the following:

- a broad statement concerning the technical field of this work;
- a description of broad system concepts;
- identification of any standard on which the work item is likely to be based;
- a list of features which the standard will define, or on which the standard will place limitations;
- a technical description of each feature listed, in broad terms; and,
- a list of any criteria which the standard must satisfy.

2.3.2 Make call for IPRs in Technical Bodies meetings

Every Technical Body and working group meeting shall start with a "Call for IPRs" (either in a written form – as part of the meeting's agenda - or in oral form) performed by the Chairman. This Call for IPRs acts as a reminder of the Member's obligations under the ETSI IPR Policy and is performed to foster the disclosure of Essential IPRs in a timely fashion.

An example of this "Call for IPRs" may be found below in Clause 2.3.3. Please note that during the Operational Co-ordination Group meetings (OCG) Chairmen will be reminded to perform that call for IPRs.

Technical Body Chairmen are also invited to encourage Members to make general IPR undertakings/licensing declarations that they will make licenses available for all their IPRs under FRAND terms and conditions related to a specific standardization area and then, as soon as feasible, provide (or refine) detailed disclosures.

2.3.3 When and How?

A formal call for IPR disclosures shall be made by the Chairman at the beginning of each meeting.

The formal call for IPR disclosures needs to be made by the Chairman orally or in writing according to the example given below. Members need to be reminded that the forms for the notification of essential IPRs and licensing declaration are available on-line and attached in Annex 6 of the ETSI Rules of Procedure.

Example of a formal call for IPRs

The attention of the members of this Technical Body is drawn to the fact that ETSI Members shall use reasonable endeavours under Clause 4.1 of the ETSI IPR Policy, Annex 6 of the Rules of Procedure, to inform ETSI of Essential IPRs in a timely fashion. This section covers the obligation to notify its own IPRs but also other companies' IPRs.

The members take note that they are hereby invited:

- to investigate in their company whether their company does own IPRs which are, or are likely to become Essential in respect of the work of the Technical Body,
- to notify to the Chairman or to the ETSI Director-General all potential IPRs that their company may own, by means of the IPR Information Statement and the Licensing Declaration forms that they can obtain from the ETSI Technical Officer or <http://www.etsi.org/WebSite/document/Legal/IPRforms.doc>.

Members are encouraged to make general IPR undertakings/declarations that they will make licenses available for all their IPRs under FRAND terms and conditions related to a specific standardization area and then, as soon as feasible, provide (or refine) detailed disclosures.

During the meeting a short reminder call for IPR disclosures should be made:

- on formal submission of a technical solution;
- on completion of the first stable draft of the standard;
- on working group approval of a draft standard;
- on TB approval of a draft standard.

E.g., this may consist of the following sentence "***May I remind Members of their obligations to use reasonable endeavours to disclose any Essential IPR [related to this issue] in a timely fashion***".

The Technical Body Chairmen should note and should make their attendees aware that disclosure of Essential or potentially Essential IPRs should be made at the earliest possible stage within the above list.

Knowing who has contributed to the development of a standard may help identify IPRs Essential to that standard.

If it becomes apparent that an IPR declaration/licensing undertaking is unlikely to be provided, the Technical Body Chairman should inform the Legal Advisor in the Secretariat, who will take the necessary action.

Ultimately, it may be necessary for the Secretariat to invoke Clause 8.1 of the Policy, which could require all work on the standard to stop. In any case, the party owning the IPR is allowed three months consideration time after the Technical Body has examined the matter and the Director-General has invited the IPR owner to reconsider its refusal to grant a license. Chairmen should use their judgment (in consultation with the Secretariat) as to whether or not the Technical Body should suspend work on the standard until the matter has been resolved.

2.3.4 Record and report information on IPRs

Technical Body Chairmen must be particularly careful to record in the report of each meeting that a reminder was issued and include details of any responses that were made. If there were no responses, then this fact should also be recorded.

Whenever a Chairman becomes aware of the existence of an Essential or potentially Essential IPR he must immediately inform the Legal Advisor of the ETSI Secretariat.

2.3.5 Copyrights in ETSI Deliverables

Chairmen shall ensure that all technical proposals adopted by their Technical Body are recorded in the minutes of the meeting, together with any restrictions on their use, and shall report them to the Secretariat. The Secretariat will inform Chairmen if copyright licenses/assignments are required. If so, then they must be obtained before publication of the document. The Secretariat will determine, with the assistance of the Chairman, which third party copyrights, if any, have to be acknowledged.

2.3.6 Confidential information

It may happen that Chairmen or Technical Bodies are offered confidential information. There are certain precautions which must be observed and Chairmen are strongly urged to contact the Secretariat before proceeding.

Clause 10 of the Policy states that information disclosed to ETSI's Technical Bodies is to be regarded as non-confidential, unless all of the following criteria are satisfied:

- the information is in written or other tangible form; and
- the information is identified in writing as confidential at the time it is submitted; and
- the information is first submitted to the Technical Body Chairman and accepted by him as confidential.

Where a Chairman becomes aware that confidential information has been disclosed in breach of a confidential disclosure agreement to which ETSI is a party, he must immediately inform the Secretariat.

2.4 ETSI Secretariat Duties

The Secretariat, and especially the Legal Advisor, have a general duty to assist the Chairmen in IPR matters. In addition to this, the Secretariat is responsible for the actions below:

2.4.1 Information on Essential IPRs in ETSI Deliverables

The ETSI Secretariat will ensure that an appropriate reminder of the duty to disclose the identity of Essential IPRs is included in all published ETSI Deliverables in the form of a standard text.

Specifically, the Secretariat shall ensure that the following marking appears in ETSI Deliverables prior to Publication, Member vote, Public Enquiry or National Vote:

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server ([SR 000 314](#)).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

2.4.2 Initiate a procedure of Clause 8 when no licensing declaration can be obtained

Where the IPR undertaking/licensing declaration as provided in Clause 6 of the ETSI IPR Policy cannot be obtained because of the refusal by the essential IPR owner, the ETSI Secretariat is obliged to initiate the procedure set out in Clause 8 of the ETSI IPR Policy. For the avoidance of doubt with regard to PATENT FAMILIES, the ETSI Secretariat is obliged to initiate a procedure of Clause 8 of the ETSI IPR Policy in every case where the IPR owner refuses to give the IPR undertaking/licensing

declaration as provided in Clause 6 of the ETSI IPR Policy for at least one member of a PATENT FAMILY regardless of the fact that the IPR owner might have given such IPR undertaking/licensing declaration for other members of the same PATENT FAMILY.

2.4.3 Non response by an IPR owner

In situation where there has been no response from an IPR owner to a request for undertaking/licensing declaration within the three months specified in Clause 6.1 of the IPR Policy or the response is not sufficiently defined the steps listed in Clause 8 of the IPR Policy should be applied.

2.4.4 Redrafting of ETSI Deliverables

Published Standards or Technical Specifications should not be redrafted because a change on the essentiality of an IPR arises unless the required undertaking/licensing declaration has not been provided within the three month period foreseen under Clause 6.1 of the IPR Policy, or has been refused. Any IPR changes should be entered into the ETSI IPR Database by the Secretariat, showing the date of the entry.

2.4.5 Disclose copyright identified in ETSI documentation

The copyright of ETSI documentation, including that produced in its Technical Bodies, is owned by ETSI. The Secretariat shall ensure that the following marking appears in ETSI Deliverables prior to Publication, Member vote, Public Enquiry or National Vote:

Reproduction is only permitted for the purpose of standardization work undertaken within ETSI.

The copyright and the foregoing restrictions extend to reproduction in all media.

© European Telecommunications Standards Institute yyyy.
All rights reserved.

This marking shall also appear in document templates provided to the Technical Organization by the Secretariat.

2.4.6 Acknowledgement of third parties copyright

Due acknowledgement of copyrights owned by third parties, which are identifiable in ETSI documentation, must be made in the following form:

Some material contained herein is the copyright of, or has been supplied
by...(insert name of party in question).

This legend should appear on the ETSI documents and/or media concerned and should immediately follow the copyright legend(s) referred to above.

In response to the obligation on Chairmen to report to the Secretariat any copyright restrictions in technical proposals adopted by their Technical Body, the Secretariat will inform Chairmen if copyright licenses/assignments are required. If so, then they must be obtained before publication of the document. The Secretariat will determine, with the assistance of the Chairman, which third party copyrights, if any, have to be acknowledged.

2.4.7 Reporting of a substantial IPR problem

The ETSI Director-General should bring any [substantial] IPR problem to the ETSI Board and/or General Assembly for further discussion.

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2.4.8 Maintenance of information on Essential IPRs

The Secretariat is responsible for the maintenance of the ETSI IPR online database and the ETSI Special Report 000 314 (see sections 3.1 and 3.2 of this guide).

3 Information on Essential IPRs by ETSI

All information statements and licensing declarations of IPRs received by ETSI are publicly available to ETSI Members and standards' implementers via two means: The ETSI Special Report (SR) 000 314 and the ETSI IPR Online Database.

3.1 Where to find information on essential IPRs

3.1.1 ETSI Special Report 000 314

The ETSI Special report SR 000 314 is an ETSI Deliverable entirely dedicated to information on IPRs which have been notified to ETSI as being Essential, or potentially Essential, to ETSI standards. This SR is generated twice a year and offers a summary of the information contained in the ETSI IPR Online database as of the time it is generated.

In case of any conflict between the information contained in SR 000 314 and the information contained in the ETSI IPR Online Database, the contents of the database takes precedence.

ETSI SR 000 314 can be found at: ([SR 000 314](#)).

3.1.2 The ETSI IPR Online Database

The ETSI IPR Online Database is an application that has been developed by the ETSI Secretariat to allow electronic online access to Information Statements and Licensing Declarations received by ETSI.

Like the SR 000 314, the ETSI IPR Online Database contains IPRs, particularly patents and patent applications, which have been notified to ETSI as being essential, or potentially essential, to ETSI standards.

Unless otherwise specified, all IPRs contained herein have been notified to ETSI, with an undertaking from the owner to grant licenses according to the terms and conditions of Clause 6.1 of Annex 6 of the ETSI Rules of Procedure (the ETSI IPR Policy).

It is important to note that the ETSI IPR online database provides data that is based on the information received, i.e.:

- ETSI has not checked the validity of the information, nor the relevance of the identified patents/patent applications to the ETSI standards and cannot confirm, or deny, that the patents/patent applications are, in fact, essential, or potentially essential;
- No investigation or IPR searches have been carried out by ETSI and therefore, no guarantee can be given concerning the existence of other IPRs which are, or may become, essential;
- Potential licensees should use the information in this database at their discretion and should contact the patent holder, for example to establish the status of a disclosed patent family, prior to making a patent licensing decision.

The ETSI IPR Online Database can be found at: <http://webapp.etsi.org/ipr>.

3.1.3 Requests to the ETSI Secretariat

Whenever requested, the ETSI Secretariat shall provide any details on information statements and licensing undertakings/licensing declarations that it has received. The main contact point is the ETSI Legal Advisor.

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3.2 What type of information and procedures for updates

IPR information reflected by ETSI is based on the information received. ETSI has not checked the validity of the information, nor the relevance of the identified patents/patent applications to the ETSI standards and cannot confirm, or deny, that the patents/patent applications are, in fact, essential, or potentially essential. No investigation or IPR searches have been carried out by ETSI and therefore, no guarantee can be given concerning the existence of other IPRs which are, or may become, essential.

3.2.1 Assessment of IPR rights

As a general principle, ETSI does not perform any check on the status and validity of any Essential IPRs notified to ETSI.

In addition, ETSI does not perform any search for Essential IPRs which may exist and have not been notified.

3.2.2 Update procedure for the ETSI IPR Online database

In addition to the entry of new disclosures and undertakings/licensing declarations, existing data in the ETSI IPR Database should only be updated based on information received from IPR holders or as the result of a General Assembly decision, in particular with respect to the following cases:

- **Completion of an existing data entry**, e.g. the publication number, identification of standard.
- **Updating of legal information**, such as change of legal status of an IPR (e.g. grant, dropped, revoked or expired), change of ownership of the IPR.
- **Addition of information concerning studies performed on the essentiality of an IPR**: Members are obliged to disclose IPRs, which might be essential and ETSI is obliged to make these disclosures available to Members. This disclosure reflects, of course, only an opinion of the Member and some facts on the IPRs, but the Member is responsible for the content. Any further opinion should be added only with the agreement of the Member or to implement a General Assembly decision.
- **Removal of IPR disclosures at the request of the IPR holder**: Members are obliged to declare IPRs which they believe to be essential. A license undertaking/licensing declaration for these IPRs is also published. ETSI is obliged to publish this undertaking/licensing declaration. Any such removal shall be tracked in the IPR on-line database.
- **Removal of IPR disclosures in exceptional circumstances**: Removals not requested by the IPR holder shall only be performed following a decision taken by the General Assembly. Any such removal shall be tracked in the IPR on-line database.

4 Other ETSI IPR Policy matters

4.1 Licensing terms and ex ante disclosure

Specific licensing terms and negotiations are commercial issues between the companies and shall not be addressed within ETSI. Technical Bodies are not the appropriate place to discuss IPR Issues. Technical Bodies do not have the competence to deal with commercial issues. Members attending ETSI Technical Bodies are often technical experts who do not have legal or business responsibilities with regard to licensing issues. Discussion on licensing issues among competitors in a standards making process can significantly complicate, delay or derail this process.

Without prejudice to ETSI IPR Policy and other sections of this Guide, voluntary, unilateral, public, ex ante disclosures of licensing terms by licensors of Essential IPRs, for the sole purpose of assisting members in making informed (unilateral and independent) decisions in relation to whether solutions best meet the technical objectives, are not prohibited under ETSI Directives. Licensing terms from such disclosures may, in some circumstances, improve transparency for individual Members in considering technologies for inclusion in STANDARDS and TECHNICAL SPECIFICATIONS.

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No detailed licensing terms should be available from ETSI to avoid a misleading impression. ETSI may act as a depository, where IPR owners (licensors) can make available information on how and where to access such disclosed licensing terms, and provide links to URLs of IPR owners, which contain the details of licensing terms and conditions, so that information about the availability of licenses can be disseminated to all users of ETSI standards.

However, this provision does not create any obligation for any Member to disclose any licensing terms related to any of its IPRs. The lack of disclosure by a Member of its licensing terms does not create any implication under the ETSI Directives. Specifically, the requested undertaking in writing of an IPR owner that it is prepared to grant licenses on fair, reasonable and non-discriminatory terms and conditions pursuant to Clause 6.1 of the ETSI IPR Policy is sufficient when selecting technologies for ETSI standards and technical specifications.

4.2 Transfer of Ownership of ESSENTIAL IPRs

Taking into account the importance of a robust standards system, those implementing ETSI standards should be able to rely on licensing undertakings provided in accordance with Clause 6.1 of the ETSI IPR Policy, regardless of any change in the ownership of the relevant IPRs. To that end, it is desirable that, to the maximum extent possible in each legal jurisdiction, when ownership of an ESSENTIAL IPR is transferred, any applicable licensing undertaking should automatically transfer to the new owner. Some legal jurisdictions may already provide for achievement of this result. However, ETSI recognises that this result may not be certain in all legal jurisdictions.

Therefore, ETSI encourages:

- Prospective assignees or transferees to check for applicable licensing declarations, for example, by searching for registrations of such declarations in the ETSI IPR database;
- MEMBERS that have given General IPR licensing declarations to draw the attention of any assignee or transferee to the possibility that undertakings given in such declarations might apply to the IPRs that are to be assigned or transferred.

4.3 Dispute Resolution

ETSI Members should attempt to resolve any dispute related to the application of the IPR Policy bilaterally in a friendly manner.

Should this fail, the Members concerned are invited to inform the ETSI GA in case a friendly mediation can be offered by other ETSI Members and/or the ETSI Secretariat.

However, it should be noted that once an IPR (patent) has been granted, in the absence of an agreement between the parties involved, the national courts of law have the sole authority to resolve IPR disputes.

4.4 Notice on the use of NDAs in IPR negotiations

It is recognized that Non Disclosure Agreements (NDAs) may be used to protect the commercial interests of both potential licensor and potential licensee during an Essential IPR licensing negotiation, and this general practice is not challenged. Nevertheless, ETSI expects its Members (as well as non-ETSI Members) to engage in an impartial and honest Essential IPR licensing negotiation process for FRAND terms and conditions.

4.5 Financial contingency

Members developing products based on standards where there may be Essential IPRs, but there is uncertainty, have mechanisms available which they can use to minimize their risk. As a non-exclusive example, a Member might wish to put in place financial contingency, based on their assessment of "reasonable", against the possibility that further/additional license fees might become payable.

4.6 Rationale and clarifying texts for the changes in Clause 4.1 of the ETSI IPR Policy

A revised version of the Clause 4.1 of the ETSI IPR Policy was adopted by the 46th General Assembly on November 2005. This revision was induced by the EC DG COMPETITION in its concern to generate a general awareness of the risk of "patent ambush" situation in the standard making process.

4.6.1 History of changes

Prior to the 46th ETSI General Assembly, Clause 4.1 of the ETSI IPR Policy read:

- 4.1 *Each MEMBER shall use its reasonable endeavours to timely inform ETSI of ESSENTIAL IPRs it becomes aware of. In particular, a MEMBER submitting a technical proposal for a STANDARD or TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted.*

During the 46th ETSI General Assembly the modifications below to Clause 4.1 of the ETSI IPR Policy were adopted.

- 4.1 *Subject to Clause 4.2 below, Each MEMBER shall use its reasonable endeavours, in particular during the development of a STANDARD or TECHNICAL SPECIFICATION where it participates, in particular to timely inform ETSI of ESSENTIAL IPRs in a timely fashion.*~~*it becomes aware of. In particular, a MEMBER submitting a technical proposal for a STANDARD or TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted.*~~

4.6.2 EC DG COMPETITION's position regarding the rationale and scope for the changes of Clause 4.1 of the ETSI IPR Policy

The extracts below are taken from various correspondences between ETSI and the EC DG COMPETITION services.

4.6.2.1 Addition of the sentence "Subject to Clause 4.2 below..." and Deletion of the phrase "... it is aware of or becomes aware of."

RATIONALE from DG COMPETITION

" the deletion of the phrase "*becomes aware of*" is important from the Commission's "patent ambush" perspective...."

Source: DG COMPETITION letter dated 26 April 2005 reproduced in B#52(05)17, Annex, Footnote 2.

CLARIFYING LANGUAGE from DG COMPETITION"

" the deletion of the phrase "*becomes aware of*" is important from the Commission's "patent ambush" perspective, [but] does not imply an extra burden on ETSI Members - by definition, a company can only inform about essential IPRs if it has knowledge of such IPRs."

Source: DG COMPETITION letter dated 26 April 2005 reproduced in B#52(05)17, Annex, Footnote 2.

"... the deletion of the words "*becomes aware of*" "*arguably imposes a higher burden of disclosure for the ETSI Members*". More specifically, you raise the concern that this might oblige Members to conduct IPR searches. We do not believe that this concern is warranted. As Mr. Mensching noted in his letter of 28 January 2005, the rationale behind the proposed deletion of "*becomes aware of*" is that we would expect a Member in a standard-setting process to have a general awareness of the scope of its IPR rights in that area, and therefore

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where necessary, "*use its reasonable endeavours*" to identify these IPR.¹ However, as has been explicitly confirmed to you in writing on numerous occasions, this does not mean that we would expect Members² to conduct patent/IPR searches. As such, our proposed change does not create a heightened expectation for Members to identify essential IPRs. Nor does it create any contradiction with Article 4.2 of ETSI's IPR policy. Nevertheless, in order to explicitly convey this message in ETSI's IPR policy itself, we would be willing to incorporate, at the beginning of Article 4.1, the phrase "*Subject to Clause/Article 4.2 below*". "

Source: DG COMPETITION LETTER dated 29 March 2005 reproduced in GA#45(05)22, Annex I, paragraph 4.

4.6.2.2 Addition of the phrase "... where it participates ..."

RATIONALE from DG COMPETITION

"The addition of the phrase "*in which it participates*" therefore addresses the concern expressed by some ETSI members, and also means that to the extent that a member is not participating in an ETSI standards development committee/working group but becomes aware of certain essential IPRs,³ a general obligation to inform ETSI of the essential IPRs remains".

Source: DG COMPETITION LETTER dated 26 April 2005 reproduced in B#52(05)17r1, Annex III (paragraph 4 of Annex to the EC letter of 26.04.05).

4.6.2.3 Re the expression "in particular"

CLARIFYING LANGUAGE from DG COMPETITION

"Firstly, I note your concern that DG Competition's proposed wording might be interpreted as narrowing the obligation to disclose essential IPR to a very specific phase of the standardisation process. As you stress, we have already confirmed that our proposed changes do not mean that the window of opportunity to declare essential IPR is closed when a standard is adopted. However, to more explicitly address your concern in Article 4.1 of the IPR rules, we are happy to accept your proposed addition of the words "*in particular*".

Source: DG COMPETITION LETTER dated 29 March 2005 reproduced in GA#45(05)22, Annex I, paragraph 2.

4.6.3 ETSI's position regarding the rationale and scope for the changes of Clause 4.1 of the ETSI IPR Policy

The extracts below has been developed, with the support of EC DG COMPETITION, by the ETSI membership and endorsed by the 46th ETSI General Assembly.

4.6.3.1 Re the addition of the sentence "Subject to Clause 4.2 below..."

The insertion of the phrase "Subject to Clause 4.2 below" at the beginning of the first sentence of the new text of Clause 4.1 is intended to reflect the general framework under which the requirement of disclosure of Clause 4.1 operates. This insertion explicitly conveys the notion that the requirement of disclosure contained in Clause 4.1 is not to be interpreted as an obligation on ETSI Members to conduct IPR searches.

As DG COMPETITION explicitly confirmed to ETSI in writing on numerous occasions;

¹ Once again, this is consistent with the notion of members being invited by the meeting Chairman to identify essential IPR at the beginning of each relevant meeting.

² whether or not they are participating in the development of a standard.

³ In this regard, as you correctly noted at the General Assembly, the deletion of the phrase "*becomes aware of*" is important from the Commission's "patent ambush" perspective, but does not imply an extra burden on ETSI members - by definition, a company can only inform about essential IPRs if it has knowledge of such IPRs.

- the new text of Clause 4.1 "does not mean that we would expect Members⁴ to conduct patent/IPR searches. As such, our proposed change does not create a heightened expectation for Members to identify essential IPRs. Nor does it create any contradiction with Article 4.2 of ETSI's IPR policy. Nevertheless, in order to explicitly convey this message in ETSI's IPR policy itself, we would be willing to incorporate, at the beginning of Article 4.1, the phrase "Subject to Clause/Article 4.2 below".

Source: Letter from Angel Trabacete, DG COMPETITION, to Karl Heinz Rosenbrock, ETSI Director-General, 29 March 2005 reproduced in GA#45(05)22, Annex I, paragraph 4.

- "it is clear that it should not be reasonably expected that an ETSI Member should have a duty to take steps to find out about potential IPR it might have relating to ETSI standards development work in areas/committees where that Member is not participating in that work (no more than it should be expected, as we have previously confirmed, that a Member carry out patent/IPR searches)."

Source: Letter from Angel Tradacete, DG COMPETITION, to Karl Heinz Rosenbrock, ETSI Director-General, 26 April 2005, reproduced in B#52(05)17r1, Annex III (paragraph 2 of Annex to the EC letter of 26.04.05).

4.6.3.2 Re the deletion of the phrase "... it is aware of or becomes aware of."

DG COMPETITION's intention in pursuing deletion of the phrase "*it becomes aware of*" is viewed as important from the patent ambush perspective.⁵ The idea is to prevent an ETSI Member from intentionally not disclosing Essential Intellectual Property Rights (EIPR) during the standardization process, and after the standard has issued, then disclosing such EIPR with the intention to not license on fair, reasonable, and non-discriminatory (FRAND) terms as expected by ETSI Policy for EIPR⁶. Intentional non-disclosure of EIPR generally occurs in two instances:

- 1) when a representative participating in a Technical Body on behalf of a Member has actual knowledge of EIPR, and yet the Member holds back notification; or,
- 2) when a member fosters an atmosphere of ignorance amongst its employees participating at ETSI with the intent to avoid its EIPR disclosure and FRAND licensing obligations.

DG COMPETITION has made it clear that the removal of the "*it becomes aware of*" wording is not intended to place a higher burden of disclosure upon a Member, nor is it intended to create a heightened expectation for Members to identify EIPR.⁷ This position is consistent with the ETSI IPR Policy and ETSI practice to requiring Members participating in Technical Bodies to respond at the earliest possible time to the Call for IPRs performed by Technical Body Chairmen at the beginning of each meeting, based on the working knowledge of their participants.⁸

Further, it has been explicitly confirmed by DG COMPETITION on numerous occasions that the removal of the words does not mean a Member would be required to conduct patent/IPR searches.⁹

Concern has been raised that removal of the "it becomes aware of" wording places an untenably broad burden of disclosure on ETSI Members. Based on the above, it appears the intent is for the burden to remain the same while identifying conduct whereby "patent ambush" in violation of the ETSI IPR Policy may be assumed.

⁴ Whether or not they are participating in the development of a standard.

⁵ DG COMPETITION letter dated 26 April 2005

⁶ ETSI IPR Policy, Section 6.1.

⁷ DG COMPETITION letter dated 26 April 2005.

⁸ ETSI Guide on Intellectual Property Rights, Section 2.3.1.

⁹ DG COMPETITION letter dated 29 March 2005.

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4.6.3.3 Addition of the phrase "... where it participates ..."

The term "where it participates" as employed in Clause 4.1 seeks to clarify that a Member's obligation to use such reasonable endeavours under this Clause should be adhered to in those Technical Bodies or its Working Groups in which an employee (or otherwise authorised representative) of such Member (as defined within the ETSI IPR Policy) performs at least one of the following:

- i) attends a meeting of;
- ii) participates in or contributes, directly or indirectly, to the work of;
- iii) votes on any matter raised within;

such Technical Body or Working Group where such Technical Body or Working Group is responsible for the ETSI Work Item from which such STANDARD or TECHNICAL SPECIFICATION, [as an ETSI Deliverable], has or will result.

4.6.3.4 Re the expression "in particular"

The insertion of the phrase "*in particular*" in the first sentence of the new text of Clause 4.1 is intended to reflect the importance placed by DG COMPETITION on a member's informing ETSI of Essential IPRs during the period when that information might be most relevant to the development of a Standard of Technical Specification. DG COMPETITION has made clear (see DG Competition Letter dated 29 March 2005 reproduced in GA#45(05)22, Annex 1, paragraph 2) that the inclusion of this phrase does not mean either that the window of opportunity for a member to declare its Essential IPRs is closed once a standard is adopted or that the member's duty to use its "*reasonable endeavours*" post-adoption is waived or altered.

4.6.3.5 Re the expression "Reasonable Endeavours"

The new text of Clause 4.1 of the ETSI IPR Policy provides, in part, that each ETSI Member "*shall use its reasonable endeavours, in particular during the development of a Standard or Technical Specification where it participates, to inform ETSI of Essential IPRs in a timely fashion.*" Clause 4.2 of the ETSI IPR Policy provides that these disclosure obligations "do however not imply any obligation on Members to conduct IPR searches."

As DG COMPETITION has pointed out, the concept of "*reasonable endeavours*" qualifies the obligation to disclose essential patents. As it has noted, "*it is clear that it should not be reasonably expected that an ETSI Member should have a duty to take steps to find out about potential IPR it might have relating to ETSI standards development work in areas/committees where that Member is not participating in that work (no more than it should be expected, as we have previously confirmed, that a member carry out patent/IPR searches).*"

Source: Letter from Angel Tradacete, DG COMPETITION, to Karl Heinz Rosenbrock, ETSI Director General, 26 April 2005, at Annex.

This interpretation by DG COMPETITION is supported by the longstanding interpretation of "*reasonable endeavours*" in the ETSI Guide on Intellectual Property Rights. The steps that must be taken to identify essential patents focus on the activities and knowledge of the ETSI Member's representatives who are active in a particular ETSI matter. Each Technical Body and working group meeting, for example, must begin with a call for IPRs. See ETSI Guide on Intellectual Property Rights, Section 2.3.2. "*Members participating in Technical Bodies should respond at the earliest possible time to the Call for IPRs performed by Technical Body Chairmen at the beginning of each meeting, based on the working knowledge of their participants.*" *Id.*, Section 2.1.1.

Accordingly, it seems that the "*reasonable endeavours*" that are to be taken to disclose patents that are essential to a particular ETSI deliverable should be measured in terms of the knowledge of representatives of an ETSI Member who are actively involved in the work of the body developing that ETSI deliverable. This interpretation acknowledges, as DG COMPETITION has noted, that "*reasonable endeavours*" has the benefit of being able to cover different scenarios on their merits on a logical, case-by-case basis."

Source: Letter from Angel Tradacete at Annex, note 1.

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Annex A ETSI Intellectual Property Rights Policy

See ETSI Rules of Procedure, Annex 6.

Annex B Void

This Annex previously contained the ETSI IPR Information Statement and Licensing Declaration forms which have been moved to the ETSI IPR Policy itself (RoP Annex 6).

Annex C Check list of the Chairmen's obligations in respect of the notification and disclosure of IPRs

- Check that the scope statements for work items are sufficiently defined
- Perform "call for IPRs" in Technical Bodies meetings:
 - at the beginning of meetings using the text supplied in Clause 2.3.3 of the IPR Guide.
 - during meetings: (reminder of the formal call of IPRs) as in Clause 2.3.3 of the IPR Guide:
 - on formal submission of a technical solution;
 - on completion of a first stable draft;
 - on working group approval of a draft standard;
 - on TB approval of a draft standard.
- Record that the "call" has been performed.
- Record any responses received (or the absence thereof) and inform the Secretariat.
- Record any copyright identified (or absence thereof) and inform the Secretariat.

EXHIBIT C

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Annex 6: ETSI Intellectual Property Rights Policy

1 Introduction

The General Assembly of ETSI has established the following Intellectual Property Rights POLICY.

2 Definitions

Terms in the POLICY which are written in capital letters shall have the meaning set forth in Clause 15 entitled DEFINITIONS.

3 Policy Objectives

- 3.1 It is ETSI's objective to create STANDARDS and TECHNICAL SPECIFICATIONS that are based on solutions which best meet the technical objectives of the European telecommunications sector, as defined by the General Assembly. In order to further this objective the ETSI IPR POLICY seeks to reduce the risk to ETSI, MEMBERS, and others applying ETSI STANDARDS and TECHNICAL SPECIFICATIONS, that investment in the preparation, adoption and application of STANDARDS could be wasted as a result of an ESSENTIAL IPR for a STANDARD or TECHNICAL SPECIFICATION being unavailable. In achieving this objective, the ETSI IPR POLICY seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs.
- 3.2 IPR holders whether members of ETSI and their AFFILIATES or third parties, should be adequately and fairly rewarded for the use of their IPRs in the implementation of STANDARDS and TECHNICAL SPECIFICATIONS.
- 3.3 ETSI shall take reasonable measures to ensure, as far as possible, that its activities which relate to the preparation, adoption and application of STANDARDS and TECHNICAL SPECIFICATIONS, enable STANDARDS and TECHNICAL SPECIFICATIONS to be available to potential users in accordance with the general principles of standardization.

4 Disclosure of IPRs

- 4.1 Subject to Clause 4.2 below, each MEMBER shall use its reasonable endeavours, in particular during the development of a STANDARD or TECHNICAL SPECIFICATION where it participates, to inform ETSI of ESSENTIAL IPRs in a timely fashion. In particular, a MEMBER submitting a technical proposal for a STANDARD or TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted.
- 4.2 The obligations pursuant to Clause 4.1 above do however not imply any obligation on MEMBERS to conduct IPR searches.
- 4.3 The obligations pursuant to Clause 4.1 above are deemed to be fulfilled in respect of all existing and future members of a PATENT FAMILY if ETSI has been informed of a member of this PATENT FAMILY in a timely fashion. Information on other members of this PATENT FAMILY, if any, may be voluntarily provided.

5 Procedures for Committees

ETSI shall establish guidelines for the chairmen of COMMITTEES with respect to ESSENTIAL IPRs.

6 Availability of Licences

- 6.1 When an ESSENTIAL IPR relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the

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owner to give within three months an irrevocable undertaking in writing that it is prepared to grant irrevocable licences on fair, reasonable and non-discriminatory terms and conditions under such IPR to at least the following extent:

- MANUFACTURE, including the right to make or have made customized components and sub-systems to the licensee's own design for use in MANUFACTURE;
- sell, lease, or otherwise dispose of EQUIPMENT so MANUFACTURED;
- repair, use, or operate EQUIPMENT; and
- use METHODS.

The above undertaking may be made subject to the condition that those who seek licences agree to reciprocate.

In the event a MEMBER assigns or transfers ownership of an ESSENTIAL IPR that it disclosed to ETSI, the MEMBER shall exercise reasonable efforts to notify the assignee or transferee of any undertaking it has made to ETSI pursuant to Clause 6 with regard to that ESSENTIAL IPR.

- 6.2 An undertaking pursuant to Clause 6.1 with regard to a specified member of a PATENT FAMILY shall apply to all existing and future ESSENTIAL IPRs of that PATENT FAMILY unless there is an explicit written exclusion of specified IPRs at the time the undertaking is made. The extent of any such exclusion shall be limited to those explicitly specified IPRs.
- 6.3 As long as the requested undertaking of the IPR owner is not granted, the COMMITTEE Chairmen should, if appropriate, in consultation with the ETSI Secretariat use their judgment as to whether or not the COMMITTEE should suspend work on the relevant parts of the STANDARD or TECHNICAL SPECIFICATION until the matter has been resolved and/or submit for approval any relevant STANDARD or TECHNICAL SPECIFICATION.
- 6.4 At the request of the European Commission and/or EFTA, initially for a specific STANDARD or TECHNICAL SPECIFICATION or a class of STANDARDS/TECHNICAL SPECIFICATIONS, ETSI shall arrange to have carried out in a competent and timely manner an investigation including an IPR search, with the objective of ascertaining whether IPRs exist or are likely to exist which may be or may become ESSENTIAL to a proposed STANDARD or TECHNICAL SPECIFICATIONS and the possible terms and conditions of licences for such IPRs. This shall be subject to the European Commission and/or EFTA meeting all reasonable expenses of such an investigation, in accordance with detailed arrangements to be worked out with the European Commission and/or EFTA prior to the investigation being undertaken.

6bis Use of the IPR Licensing Declaration Forms

MEMBERS shall use one of the ETSI IPR Licensing Declaration forms at the Appendix to this ETSI IPR Policy to make their IPR licensing declarations.

7 Information on IPR by ETSI

- 7.1 Any published STANDARD or TECHNICAL SPECIFICATION shall include information pertaining to ESSENTIAL IPRs which are brought to the attention of ETSI prior to such publication.
- 7.2 ETSI shall establish appropriate procedures to allow access to information at any time with respect to ESSENTIAL IPRs which have been brought to the attention of ETSI.

8 Non-availability of Licences

- 8.1 Non-availability of licences prior to the publication of a STANDARD or a TECHNICAL SPECIFICATION

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8.1.1 Existence of a viable alternative technology

Where prior to the publication of a STANDARD or a TECHNICAL SPECIFICATION an IPR owner informs ETSI that it is not prepared to license an IPR in respect of a STANDARD or TECHNICAL SPECIFICATION in accordance with Clause 6.1 above, the General Assembly shall review the requirement for that STANDARD or TECHNICAL SPECIFICATION and satisfy itself that a viable alternative technology is available for the STANDARD or TECHNICAL SPECIFICATION which:

- is not blocked by that IPR; and
- satisfies ETSI's requirements.

8.1.2 Non-existence of a viable alternative technology

Where, in the opinion of the General Assembly, no such viable alternative technology exists, work on the STANDARD or TECHNICAL SPECIFICATION shall cease, and the Director-General of ETSI shall observe the following procedure:

- a) If the IPR owner is a MEMBER,
 - i) the Director-General of ETSI shall request that MEMBER to reconsider its position.
 - ii) If that MEMBER however decides not to withdraw its refusal to license the IPR, it shall then inform the Director-General of ETSI of its decision and provide a written explanation of its reasons for refusing to license that IPR, within three months of its receipt of the Director-General's request.
 - iii) The Director-General of ETSI shall then send the MEMBER's explanation together with relevant extracts from the minutes of the General Assembly to the ETSI Counsellors for their consideration.
- b) If the IPR owner is a third party,
 - i) the Director-General of ETSI shall, wherever appropriate, request full supporting details from any MEMBER who has complained that licences are not available in accordance with Clause 6.1 above and/or request appropriate MEMBERS to use their good offices to find a solution to the problem.
 - ii) Where this does not lead to a solution the Director-General of ETSI shall write to the IPR owner concerned for an explanation and request ultimately that licences be granted according to Clause 6.1 above.
 - iii) Where the IPR owner refuses the Director-General's request and decides not to withdraw its refusal to license the IPR or does not answer the letter within three months after the receipt of the Director-General's request, the Director-General shall then send the IPR owner's explanation, if any, together with relevant extracts from the minutes of the General Assembly to the ETSI Counsellors for their consideration.

8.1.3 Prior to any decision by the General Assembly, the COMMITTEE should in consultation with the ETSI Secretariat use their judgment as to whether or not the COMMITTEE should pursue development of the concerned parts of the STANDARD or a TECHNICAL SPECIFICATION based on the non-available technology and should look for alternative solutions.

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8.2 Non-availability of licences after the publication of a STANDARD or a TECHNICAL SPECIFICATION

Where, in respect of a published STANDARD or TECHNICAL SPECIFICATION, ETSI becomes aware that licences are not available from an IPR owner in accordance with Clause 6.1 above, that STANDARD or TECHNICAL SPECIFICATION shall be referred to the Director-General of ETSI for further consideration in accordance with the following procedure:

- i) The Director-General shall request full supporting details from any MEMBER or third party who has complained that licences are not available in accordance with Clause 6.1 above.
- ii) The Director-General shall write to the IPR owner concerned for an explanation and request that licences be granted according to Clause 6.1 above. Where the concerned IPR owner is a MEMBER, it shall inform the Director-General of ETSI of its decision and provide a written explanation of its reasons in case of continuing refusal to license that IPR.
- iii) Where the IPR owner refuses the Director-General's request or does not answer the letter within three months, the Director-General shall inform the General Assembly and, if available, provide the General Assembly with the IPR owner's explanation for consideration. A vote shall be taken in the General Assembly on an individual weighted basis to immediately refer the STANDARD or TECHNICAL SPECIFICATION to the relevant COMMITTEE to modify it so that the IPR is no longer ESSENTIAL.
- iv) Where the vote in the General Assembly does not succeed, then the General Assembly shall, where appropriate, consult the ETSI Counsellors with a view to finding a solution to the problem. In parallel, the General Assembly may request appropriate MEMBERS to use their good offices to find a solution to the problem.
- v) Where (iv) does not lead to a solution, then the General Assembly shall request the European Commission to see what further action may be appropriate, including non-recognition of the STANDARD or TECHNICAL SPECIFICATION in question.

In carrying out the foregoing procedure due account shall be taken of the interest of the enterprises that have invested in the implementation of the STANDARD or TECHNICAL SPECIFICATION in question.

9 ETSI ownership of IPRs

- 9.1 The ownership of the copyright in STANDARDS and TECHNICAL SPECIFICATIONS documentation and reports created by ETSI or any of its COMMITTEES shall vest in ETSI but due acknowledgement shall be given to copyrights owned by third parties that are identifiable in ETSI copyrighted works.
- 9.2 In respect of IPRs other than copyright in STANDARDS and TECHNICAL SPECIFICATIONS documentation and reports, ETSI shall only seek ownership of IPRs generated either by its employees or by secondees to ETSI from organizations who are not MEMBERS.
- 9.3 ETSI shall, on request by a non-member, grant licences to that non-member on fair and reasonable terms and conditions in respect of any IPRs, other than those referred to in Clause 9.1 above, owned by ETSI. MEMBERS shall be allowed to use IPRs owned by ETSI free of charge.

10 Confidentiality

The proceedings of a COMMITTEE shall be regarded as non-confidential except as expressly provided below and all information submitted to a COMMITTEE shall be treated as if non-confidential and shall be available for public inspection unless:

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ETSI Rules of Procedure, 8 April 2009

- the information is in written or other tangible form; and
- the information is identified in writing, when submitted, as confidential; and
- the information is first submitted to, and accepted by, the chairman of the COMMITTEE as confidential.

CONFIDENTIAL INFORMATION incorporated in a STANDARD or TECHNICAL SPECIFICATION shall be regarded as non-confidential by ETSI and its MEMBERS, from the date on which the STANDARD or TECHNICAL SPECIFICATION is published.

11 Reproduction of Standards Documentation

MEMBERS may make copies of STANDARDS and TECHNICAL SPECIFICATIONS documentation produced by ETSI for their own use free of charge but may not distribute such copies to others.

12 Law and Regulation

The POLICY shall be governed by the laws of France. However, no MEMBER shall be obliged by the POLICY to commit a breach of the laws or regulations of its country or to act against supranational laws or regulations applicable to its country insofar as derogation by agreement between parties is not permitted by such laws.

Any right granted to, and any obligation imposed on, a MEMBER which derives from French law and which are not already contained in the national or supranational law applicable to that MEMBER is to be understood as being of solely a contractual nature.

13 Policy Decisions

Without prejudice to ETSI's Statutes and Rules of Procedure, no decisions shall be taken by ETSI in relation to implementation of the POLICY unless supported by a 71 % majority of the weighted individual votes cast by MEMBERS.

14 Violation of Policy

Any violation of the POLICY by a MEMBER shall be deemed to be a breach, by that MEMBER, of its obligations to ETSI. The ETSI General Assembly shall have the authority to decide the action to be taken, if any, against the MEMBER in breach, in accordance with the ETSI Statutes.

15 Definitions

1 "AFFILIATE" of a first legal entity means any other legal entity:

- directly or indirectly owning or controlling the first legal entity, or
- under the same direct or indirect ownership or control as the first legal entity, or
- directly or indirectly owned or controlled by the first legal entity,

for so long as such ownership or control lasts.

Ownership or control shall exist through the direct or indirect:

- ownership of more than 50 % of the nominal value of the issued equity share capital or of more than 50 % of the shares entitling the holders to vote for the election of directors or persons performing similar functions, or

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- right by any other means to elect or appoint directors, or persons who collectively can exercise such control. A state, a division of a state or other public entity operating under public law, or any legal entity, linked to the first legal entity solely through a state or any division of a state or other public entity operating under public law, shall be deemed to fall outside the definition of an AFFILIATE.
- 2 **"COMMITTEE"** shall mean any Technical Body of ETSI and shall include ETSI Projects, Technical Committees, ETSI Partnership Projects, and their Working Groups.
 - 3 **"CONFIDENTIAL INFORMATION"** shall mean all information deemed to be confidential pursuant to Clause 10 of the POLICY disclosed directly or indirectly to the MEMBER.
 - 4 **"EQUIPMENT"** shall mean any system, or device fully conforming to a STANDARD.
 - 5 **"METHODS"** shall mean any method or operation fully conforming to a STANDARD.
 - 6 **"ESSENTIAL"** as applied to IPR means that it is not possible on technical (but not commercial) grounds, taking into account normal technical practice and the state of the art generally available at the time of standardization, to make, sell, lease, otherwise dispose of, repair, use or operate EQUIPMENT or METHODS which comply with a STANDARD without infringing that IPR. For the avoidance of doubt in exceptional cases where a STANDARD can only be implemented by technical solutions, all of which are infringements of IPRs, all such IPRs shall be considered ESSENTIAL.
 - 7 **"IPR"** shall mean any intellectual property right conferred by statute law including applications therefor other than trademarks. For the avoidance of doubt rights relating to get-up, confidential information, trade secrets or the like are excluded from the definition of IPR.
 - 8 **"MANUFACTURE"**, shall mean production of EQUIPMENT.
 - 9 **"MEMBER"** shall mean a member or associate member of ETSI. References to a MEMBER shall wherever the context permits be interpreted as references to that MEMBER and its AFFILIATES.
 - 10 **"POLICY"** shall mean ETSI's Intellectual Property Rights Policy.
 - 11 **"STANDARD"** shall mean any standard adopted by ETSI including options therein or amended versions and shall include European Standards (ENs) (telecommunications series), ETSI Standards (ESs), Common Technical Regulations (CTRs) which are taken from ENs (telecommunications series) and including drafts of any of the foregoing, and documents made under the previous nomenclature, including ETSS, I-ETSS, parts of NETs and TBRs, the technical specifications of which are available to all MEMBERS, but not including any standards, or parts thereof, not made by ETSI.
- The date on which a STANDARD is considered to be adopted by ETSI for the purposes of this POLICY shall be the date on which the technical content of that STANDARD was available to all MEMBERS.
- 12 **"TECHNICAL SPECIFICATION"** shall mean any Technical Specification (TS) adopted by ETSI including options therein or amended version including drafts, the Technical Specifications of which are available to all MEMBERS, but not including any technical specifications, or parts thereof, not made by ETSI.

The date on which a TECHNICAL SPECIFICATION is considered to be adopted by ETSI for the purposes of this POLICY shall be the date on which the technical content of that TECHNICAL SPECIFICATION was available to all MEMBERS.

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- 13 “**PATENT FAMILY**” shall mean all the documents having at least one priority in common, including the priority document(s) themselves. For the avoidance of doubt, “documents” refers to patents, utility models, and applications therefor.

Annex 6 - Appendix A: IPR Licensing Declaration forms**IPR HOLDER / ORGANISATION ("Declarant")**

Legal Name: _____

CONTACT DETAILS FOR LICENSING INFORMATION:

Name and Title: _____

Department: _____

Address: _____

Telephone: _____ Fax: _____

Email: _____ URL: _____

GENERAL IPR LICENSING DECLARATION

In accordance with Clause 4.1 of the ETSI IPR Policy the Declarant and/or its AFFILIATES hereby informs ETSI that **(check one box only)**:

- ☐ with reference to ETSI STANDARD(S) or TECHNICAL SPECIFICATION(S) No.: _____, or
- ☐ with reference to ETSI Project(s): _____, or
- ☐ with reference to all ETSI STANDARDS AND TECHNICAL SPECIFICATIONS

and with reference to **(check one box only)**:

- ☐ IPR(s) contained within technical contributions made by the Declarant and/or its AFFILIATES, or
- ☐ any IPRs

the Declarant hereby irrevocably declares that it and its AFFILIATES are prepared to grant irrevocable licenses under its/their IPR(s) on terms and conditions which are in accordance with Clause 6.1 of the ETSI IPR Policy, in respect of the STANDARD(S), TECHNICAL SPECIFICATION(S), or the ETSI Project(s), as identified above, to the extent that the IPR(s) are or become, and remain ESSENTIAL to practice that/those STANDARD(S) or TECHNICAL SPECIFICATION(S) or, as applicable, any STANDARD or TECHNICAL SPECIFICATION resulting from proposals or Work Items within the current scope of the above identified ETSI Project(s), for the field of use of practice of such STANDARD or TECHNICAL SPECIFICATION.

- ☐ This irrevocable undertaking is made subject to the condition that those who seek licences agree to reciprocate **(check box if applicable)**.

The construction, validity and performance of this General IPR licensing declaration shall be governed by the laws of France.

Terms in ALL CAPS on this form have the meaning provided in Clause 15 of the ETSI IPR Policy.

SIGNATURE

By signing this General IPR Licensing Declaration form, you represent that you have the authority to bind the Declarant and/or its AFFILIATES to the representations and commitments provided in this form.

Name of authorized person: _____

Title of authorized person: _____

Place, Date: _____

Signature: _____

*Please return this form duly signed to: ETSI Director-General
ETSI - 650, route des Lucioles - F-06921 Sophia Antipolis Cedex – France / Fax. +33 (0) 4 93 65 47 16*

IPR INFORMATION STATEMENT AND LICENSING DECLARATION**IPR HOLDER / ORGANISATION ("Declarant")**

Legal Name: _____

CONTACT DETAILS FOR LICENSING INFORMATION:

Name and Title: _____

Department: _____

Address: _____

Telephone: _____ Fax: _____

Email: _____ URL: _____

IPR INFORMATION STATEMENT

In accordance with Clause 4.1 of the ETSI IPR Policy the Declarant and/or its AFFILIATES hereby informs ETSI that it is the Declarant's and/or its AFFILIATES' present belief that the IPR(s) disclosed in the attached *IPR Information Statement Annex* may be or may become ESSENTIAL in relation to at least the ETSI Work Item(s), STANDARD(S) and/or TECHNICAL SPECIFICATION(S) identified in the attached *IPR Information Statement Annex*.

The Declarant and/or its AFFILIATES (**check one box only**):☐ are the proprietor of the IPR(s) disclosed in the attached *IPR Information Statement Annex*.☐ are not the proprietor of the IPR(s) disclosed in the attached *IPR Information Statement Annex*.**IPR LICENSING DECLARATION**

In accordance with Clause 6.1 of the ETSI IPR Policy the Declarant and/or its AFFILIATES hereby irrevocably declares the following (**check one box only, and subordinate box, where applicable**):

☐ To the extent that the IPR(s) disclosed in the attached *IPR Information Statement Annex* are or become, and remain ESSENTIAL in respect of the ETSI Work Item, STANDARD and/or TECHNICAL SPECIFICATION identified in the attached *IPR Information Statement Annex*, the Declarant and/or its AFFILIATES are prepared to grant irrevocable licences under this/these IPR(s) on terms and conditions which are in accordance with Clause 6.1 of the ETSI IPR Policy.

☐ This irrevocable undertaking is made subject to the condition that those who seek licences agree to reciprocate (**check box if applicable**).

☐ The Declarant and/or its AFFILIATES are not prepared to make the above IPR Licensing Declaration (reasons may be explained in writing in the attached *IPR Licensing Declaration Annex*).

The construction, validity and performance of this IPR information statement and licensing declaration shall be governed by the laws of France.

Terms in ALL CAPS on this form have the meaning provided in Clause 15 of the ETSI IPR Policy.

SIGNATURE

By signing this IPR Information Statement and Licensing Declaration form, you represent that you have the authority to bind the Declarant and/or its AFFILIATES to the representations and commitments provided in this form.

Name of authorized person: _____

Title of authorized person: _____

Place, Date: _____

Signature: _____

Please return this form duly signed to: ETSI Director-General
ETSI - 650, route des Lucioles - F-06921 Sophia Antipolis Cedex – France / Fax. +33 (0) 4 93 65 47 16

A5740

Please return this form together with the "IPR Information Statement and Licensing Declaration form" to:

ETSI Director-General - ETSI - 650, route des Lucioles - F-06921 Sophia Antipolis Cedex - France / Fax. +33 (0) 4 93 65 47 16

EXHIBIT D

Annex 6: ETSI Intellectual Property Rights Policy

1 Introduction

The General Assembly of ETSI has established the following Intellectual Property Rights POLICY.

2 Definitions

Terms in the POLICY which are written in capital letters shall have the meaning set forth in Clause 15 entitled DEFINITIONS.

3 Policy Objectives

- 3.1 STANDARDS shall be based on solutions which best meet the technical objectives of the European telecommunications sector, as defined by the General Assembly. In order to further this objective the ETSI IPR POLICY seeks to reduce the risk to ETSI, MEMBERS, and others applying ETSI STANDARDS, that investment in the preparation, adoption and application of STANDARDS could be wasted as a result of an ESSENTIAL IPR for a STANDARD being unavailable. In achieving this objective, the ETSI IPR POLICY seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs.
 - 3.2 IPR holders whether members of ETSI and their AFFILIATES or third parties, should be adequately and fairly rewarded for the use of their IPRs in the implementation of STANDARDS.
 - 3.3 ETSI shall take reasonable measures to ensure, as far as possible, that its activities which relate to the preparation, adoption and application of STANDARDS, enable STANDARDS to be available to potential users in accordance with the general principles of standardization.
-

4 Disclosure of IPRs

- 4.1 Each MEMBER shall use its reasonable endeavours to timely inform ETSI of ESSENTIAL IPRs it becomes aware of. In particular, a MEMBER submitting a technical proposal for a STANDARD shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted.
 - 4.2 The obligations pursuant to Clause 4.1 above do however not imply any obligation on MEMBERS to conduct IPR searches.
-

5 Procedures for Committees

ETSI shall establish guidelines for the chairmen of COMMITTEES with respect to ESSENTIAL IPRs.

6 Availability of Licences

6.1 When an ESSENTIAL IPR relating to a particular STANDARD is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the owner to give within three months an undertaking in writing that it is prepared to grant irrevocable licences on fair, reasonable and non-discriminatory terms and conditions under such IPR to at least the following extent:

- MANUFACTURE, including the right to make or have made customized components and sub-systems to the licensee's own design for use in MANUFACTURE;
- sell, lease, or otherwise dispose of EQUIPMENT so MANUFACTURED;
- repair, use, or operate EQUIPMENT; and
- use METHODS.

The above undertaking may be made subject to the condition that those who seek licences agree to reciprocate.

6.2 At the request of the European Commission and/or EFTA, initially for a specific STANDARD or a class of STANDARDS, ETSI shall arrange to have carried out in a competent and timely manner an investigation including an IPR search, with the objective of ascertaining whether IPRs exist or are likely to exist which may be or may become ESSENTIAL to a proposed STANDARD and the possible terms and conditions of licences for such IPRs. This shall be subject to the European Commission and/or EFTA meeting all reasonable expenses of such an investigation, in accordance with detailed arrangements to be worked out with the European Commission and/or EFTA prior to the investigation being undertaken.

7 Information on IPR by ETSI

7.1 Any published STANDARD shall include information pertaining to ESSENTIAL IPRs which are brought to the attention of ETSI prior to such publication.

7.2 ETSI shall establish appropriate procedures to allow access to information at any time with respect to ESSENTIAL IPRs which have been brought to the attention of ETSI.

8 Non-availability of Licences

8.1 MEMBERS' refusal to license

8.1.1 Where a MEMBER notifies ETSI that it is not prepared to license an IPR in respect of a STANDARD, the General Assembly shall review the requirement for that STANDARD and satisfy itself that a viable alternative technology is available for the STANDARD which:

- is not blocked by that IPR; and
- satisfies ETSI's requirements.

8.1.2 Where, in the opinion of the General Assembly, no such viable alternative technology exists, work on the STANDARD shall cease, and the Director-General of ETSI shall request that MEMBER to reconsider its position. If the MEMBER decides not to withdraw its refusal to license the IPR, it shall inform the Director-General of ETSI of its decision and provide a written explanation of its reasons for refusing to license that IPR, within three months of its receipt of the Director-General's request.

ETSI Rules of Procedure, 18 November 1997

The Director-General shall then send the MEMBER's explanation together with relevant extracts from the minutes of the General Assembly to the ETSI Counsellors for their consideration.

8.2 Non-availability of licences from third parties

Where, in respect of a STANDARD, ETSI becomes aware that licences are not available from a third party in accordance with Clause 6.1 above, that STANDARD shall be referred to the Director-General of ETSI for further consideration in accordance with the following procedure:

- i) The Director-General shall request full supporting details from any MEMBER who has complained that licences are not available in accordance with Clause 6.1 above.
- ii) The Director-General shall write to the IPR owner concerned for an explanation and request that licences be granted according to Clause 6.1 above.
- iii) Where the IPR owner refuses the Director-General's request or does not answer the letter within three months, the Director-General shall inform the General Assembly. A vote shall be taken in the General Assembly on an individual weighted basis to immediately refer the STANDARD to the relevant COMMITTEE to modify it so that the IPR is no longer ESSENTIAL.
- iv) Where the vote in the General Assembly does not succeed, then the General Assembly shall, where appropriate, consult the ETSI Counsellors with a view to finding a solution to the problem. In parallel, the General Assembly may request appropriate MEMBERS to use their good offices to find a solution to the problem.
- v) Where (iv) does not lead to a solution, then the General Assembly shall request the European Commission to see what further action may be appropriate, including non-recognition of the STANDARD in question.

In carrying out the foregoing procedure due account shall be taken of the interest of the enterprises that have invested in the implementation of the STANDARD in question.

9 ETSI ownership of IPRs

- 9.1 The ownership of the copyright in STANDARDS documentation and reports created by ETSI or any of its COMMITTEES shall vest in ETSI but due acknowledgement shall be given to copyrights owned by third parties that are identifiable in ETSI copyrighted works.
- 9.2 In respect of IPRs other than copyright in STANDARDS documentation and reports, ETSI shall only seek ownership of IPRs generated either by its employees or by secondees to ETSI from organizations who are not MEMBERS.
- 9.3 ETSI shall, on request by a non-member, grant licences to that non-member on fair and reasonable terms and conditions in respect of any IPRs, other than those referred to in Clause 9.1 above, owned by ETSI. MEMBERS shall be allowed to use IPRs owned by ETSI free of charge.

10 Confidentiality

The proceedings of a COMMITTEE shall be regarded as non-confidential except as expressly provided below and all information submitted to a COMMITTEE shall be treated as if non-confidential and shall be available for public inspection unless:

- the information is in written or other tangible form; and

ETSI Rules of Procedure, 18 November 1997

- the information is identified in writing, when submitted, as confidential; and
- the information is first submitted to, and accepted by, the chairman of the COMMITTEE as confidential.

CONFIDENTIAL INFORMATION incorporated in a STANDARD shall be regarded as non-confidential by ETSI and its MEMBERS, from the date on which the STANDARD is published.

11 Reproduction of Standards Documentation

MEMBERS may make copies of STANDARDS documentation produced by ETSI for their own use free of charge but may not distribute such copies to others.

12 Law and Regulation

The POLICY shall be governed by the laws of France. However, no MEMBER shall be obliged by the POLICY to commit a breach of the laws or regulations of its country or to act against supranational laws or regulations applicable to its country insofar as derogation by agreement between parties is not permitted by such laws.

Any right granted to, and any obligation imposed on, a MEMBER which derives from French law and which are not already contained in the national or supranational law applicable to that MEMBER is to be understood as being of solely a contractual nature.

13 Policy Decisions

Without prejudice to ETSI's Statutes and Rules of Procedure, no decisions shall be taken by ETSI in relation to implementation of the POLICY unless supported by a 71% majority of the weighted individual votes cast by MEMBERS.

14 Violation of Policy

Any violation of the POLICY by a MEMBER shall be deemed to be a breach, by that MEMBER, of its obligations to ETSI. The ETSI General Assembly shall have the authority to decide the action to be taken, if any, against the MEMBER in breach, in accordance with the ETSI Statutes.

15 Definitions

1 "AFFILIATE" of a first legal entity means any other legal entity:

- directly or indirectly owning or controlling the first legal entity, or
- under the same direct or indirect ownership or control as the first legal entity, or
- directly or indirectly owned or controlled by the first legal entity,

for so long as such ownership or control lasts.

Ownership or control shall exist through the direct or indirect:

ETSI Rules of Procedure, 18 November 1997

- ownership of more than 50% of the nominal value of the issued equity share capital or of more than 50% of the shares entitling the holders to vote for the election of directors or persons performing similar functions, or
 - right by any other means to elect or appoint directors, or persons who collectively can exercise such control. A state, a division of a state or other public entity operating under public law, or any legal entity, linked to the first legal entity solely through a state or any division of a state or other public entity operating under public law, shall be deemed to fall outside the definition of an AFFILIATE.
- 2 **"COMMITTEE"** shall mean any Technical Body of ETSI and shall include ETSI Projects, Technical Committees, ETSI Partnership Projects, and their Working Groups ..
- 3 **"CONFIDENTIAL INFORMATION"** shall mean all information deemed to be confidential pursuant to Clause 10 of the POLICY disclosed directly or indirectly to the MEMBER.
- 4 **"EQUIPMENT"** shall mean any system, or device fully conforming to a STANDARD.
- 5 **"METHODS"** shall mean any method or operation fully conforming to a STANDARD.
- 6 **"ESSENTIAL"** as applied to IPR means that it is not possible on technical (but not commercial) grounds, taking into account normal technical practice and the state of the art generally available at the time of standardization, to make, sell, lease, otherwise dispose of, repair, use or operate EQUIPMENT or METHODS which comply with a STANDARD without infringing that IPR. For the avoidance of doubt in exceptional cases where a STANDARD can only be implemented by technical solutions, all of which are infringements of IPRs, all such IPRs shall be considered ESSENTIAL.
- 7 **"IPR"** shall mean any intellectual property right conferred by statute law including applications therefor other than trademarks. For the avoidance of doubt rights relating to get-up, confidential information, trade secrets or the like are excluded from the definition of IPR.
- 8 **"MANUFACTURE"**, shall mean production of EQUIPMENT.
- 9 **"MEMBER"** shall mean a member or associate member of ETSI. References to a MEMBER shall wherever the context permits be interpreted as references to that MEMBER and its AFFILIATES.
- 10 **"POLICY"** shall mean ETSI's Intellectual Property Rights Policy.
- 11 **"STANDARD"** shall mean any standard adopted by ETSI including options therein or amended versions and shall include European Standards (ENs) (telecommunications series), ETSI Standards (ESs), Common Technical Regulations (CTRs) which are taken from ENs (telecommunications series) and including drafts of any of the foregoing, and documents made under the previous nomenclature, including ETSS, I-ETSS, parts of NETs and TBRs, the technical specifications of which are available to all MEMBERS, but not including any standards, or parts thereof, not made by ETSI.

The date on which a STANDARD is considered to be adopted by ETSI for the purposes of this POLICY shall be the date on which the technical specification of that STANDARD was available to all MEMBERS.

EXHIBIT E

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ETSI IPR POLICY FAQs

About ETSI

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Question 1:

Can you help me with understanding what the Intellectual Property Rights issues are with GSM? My company would like to use GSM for XXXXX, but I don't know what, if any, IPR claims there are for its use.

Answer 1:

If your company is interested in developing a product based on ETSI STANDARDS on GSM which might require the utilization of a patent declared to ETSI as essential, you should then contact the patent holder directly.

In order to do so, all references pertaining to essential IPRs declared to ETSI are publicly available on the [ETSI IPR Online database](#) of the web site.

With regards to Intellectual Property Rights (IPRs), ETSI Members are bound by the rules of the Institute ([Annex 6 of the Rules of Procedure](#) of the [ETSI Directives](#)) which require them:

- To disclose any Intellectual Property Rights that they consider essential for the implementation of an ETSI STANDARD - e.g. on GSM - (Article 4.1 Annex 6 of the ETSI Rules of Procedure) and,
- To grant licenses with regard to the above mentioned IPRs on fair, reasonable, and non discriminatory terms (Article 6.1 Annex 6 of the ETSI Rules of Procedure).

Question 2:

What do you mean by a 'Standard' and a 'Technical Specification'?

Answer 2:

According to the [ETSI Directives](#) (Annex 6 of the ETSI Rules of Procedure, Article 15.11), 'STANDARD' shall mean any standard adopted by ETSI including options therein or amended versions and shall include European Standards (ENs) (telecommunications series), ETSI Standards (ESSs), Common Technical Regulations (CTRs) which are taken from ENs (telecommunications series) and including drafts of any of the foregoing, and documents made under the previous nomenclature, including ETSSs, I-ETSSs, parts of NETs and TBRs, the technical specifications of which are available to all MEMBERS, but not including any standards, or parts thereof, not made by ETSI.

The date on which a STANDARD is considered to be adopted by ETSI for the purposes of this POLICY shall be the date on which the technical content of that STANDARD was available to all MEMBERS.

According to the ETSI Directives (Annex 6 of the ETSI Rules of Procedure, Article 15.12), 'TECHNICAL SPECIFICATION' shall mean any Technical Specification (TS) adopted by ETSI including options therein or amended version including drafts, the Technical Specifications of which are available to all MEMBERS, but not including any technical specifications, or parts thereof, not made by ETSI.

The date on which a TECHNICAL SPECIFICATION is considered to be adopted by ETSI for the purposes of this POLICY shall be the date on which the technical content of that TECHNICAL SPECIFICATION was available to all MEMBERS.

Question 3:

What is an 'Essential' IPR?

Answer 3:

According to the ETSI Directives (Annex 6 of the ETSI Rules of Procedure, Article 15.6), 'ESSENTIAL' as applied to IPR means that it is not possible on technical (but not commercial) grounds, taking into account normal technical practice and the state of the art generally available at the time of standardization, to make, sell, lease, otherwise dispose of, repair, use or operate EQUIPMENT or METHODS which comply with a STANDARD without infringing that IPR.

For the avoidance of doubt in exceptional cases where a STANDARD can only be implemented by technical solutions, all of which are infringements of IPRs, all such IPRs shall be considered ESSENTIAL.

Question 4:

Our company intends to manufacture GSM mobile stations. Can you tell me what license fee for all essential patents we will have to pay?

Are you handling it, or do we have to contact all the patent holders separately?

If we have to contact the companies separately, is there any guideline, e.g. x% of revenue as total license fee, since we are working on a business plan right now?

Answer 4:

It is the responsibility of each STANDARD user to contact directly the patent owner. ETSI is not in a position to provide guidelines for commercial negotiations. In accordance with Article 7.2 of the ETSI IPR Policy (of the ETSI Directives), the ETSI Secretariat provides to its members procedures to allow access to information with respect to essential IPRs which have been brought to the attention of ETSI.

This obligation is fulfilled by the publication of the ETSI Special Report SR 000 314 and the maintenance of the ETSI IPR online database which should be consulted for the most updated information.

Unless otherwise indicated, the owners of the IPRs listed in the above mentioned report and database have undertaken to grant licenses for these IPRs on fair, reasonable and non discriminatory terms as provided by Article 6.1 of the ETSI IPR Policy, Annex 6 of the ETSI Rules of Procedure (of the ETSI Directives).

Question 5:

Where can I find the ETSI IPR Policy?

Answer 5:

The ETSI IPR Policy is part of the ETSI Directives (our Bylaws, in other words) and is to be found in Annex 6 to the ETSI Rules of Procedures. As a result, the ETSI IPR Policy is therefore binding on ETSI Members.

Question 6:

Does one have to take permission from ETSI for using the patents as listed by ETSI in the Standards?

Answer 6:

It is necessary to obtain permission to use patents declared as essential to ETSI's STANDARDS. To this end, each STANDARD user should seek directly a license from a patent holder. In order

to obtain the contact details of a patent holder, please make your request to the [ETSI Legal Service](#).

Question 7:

Does the firm concerned have to pay some consideration to ETSI for utilizing the said patents or while buying the technology from another company?

Answer 7:

Any firm interested in obtaining patents declared essential to ETSI STANDARDS shall not pay any consideration to ETSI but to the patents holders.

To this end, the concerned firm has to enter into negotiation with the companies holding patents in order to obtain licenses for the use of the patented technology included in, and essential for the implementation of an ETSI STANDARD.

A6266 - 9123

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Annex 6: ETSI Intellectual Property Rights Policy

1 Introduction

The General Assembly of ETSI has established the following Intellectual Property Rights POLICY.

2 Definitions

Terms in the POLICY which are written in capital letters shall have the meaning set forth in Clause 15 entitled DEFINITIONS.

3 Policy Objectives

- 3.1 STANDARDS shall be based on solutions which best meet the technical objectives of the European telecommunications sector, as defined by the General Assembly. In order to further this objective the ETSI IPR POLICY seeks to reduce the risk to ETSI, MEMBERS, and others applying ETSI STANDARDS, that investment in the preparation, adoption and application of STANDARDS could be wasted as a result of an ESSENTIAL IPR for a STANDARD being unavailable. In achieving this objective, the ETSI IPR POLICY seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs.
 - 3.2 IPR holders whether members of ETSI and their AFFILIATES or third parties, should be adequately and fairly rewarded for the use of their IPRs in the implementation of STANDARDS.
 - 3.3 ETSI shall take reasonable measures to ensure, as far as possible, that its activities which relate to the preparation, adoption and application of STANDARDS, enable STANDARDS to be available to potential users in accordance with the general principles of standardization.
-

4 Disclosure of IPRs

- 4.1 Each MEMBER shall use its reasonable endeavours to timely inform ETSI of ESSENTIAL IPRs it becomes aware of. In particular, a MEMBER submitting a technical proposal for a STANDARD shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted.
 - 4.2 The obligations pursuant to Clause 4.1 above do however not imply any obligation on MEMBERS to conduct IPR searches.
-

5 Procedures for Committees

ETSI shall establish guidelines for the chairmen of COMMITTEES with respect to ESSENTIAL IPRs.

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ETSI Guide on Intellectual Property Rights (IPRs)

Version adopted by Board #70 on 27 November 2008

Background

The ETSI IPR Policy was adopted by the 21st General Assembly on 23 November 1994 and incorporated in the ETSI Directives as Annex 6 to the ETSI Rules of Procedure.

At a later stage a Technical Body Chairman's Guide on IPRs had been written to help Chairmen and others involved in ETSI's standardization activities to understand and implement the Institute's IPR Policy. That Chairman's Guide on IPR had not been endorsed by the General Assembly or the Board and therefore did not have the same official status as the ETSI Statutes, the Rules of Procedure or the Technical Working procedures. The Technical Body Chairman's Guide on IPRs is now replaced by the present ETSI Guide on IPRs.

In 2002 the ETSI General Assembly #40 identified the need to review the ETSI IPR Policy with a view to addressing and rectifying any uncertainties on the operation of this Policy and on any legal rules and obligations on the membership in order to avoid an incorrect implementation of the ETSI IPR Policy and in order to avoid anti-competitive actions. An ad-hoc IPR group, with a clear mandate to review the implementation of the IPR Policy but not to change the Policy itself, was consequently created and 30 recommendations on the operation of the ETSI IPR Policy were approved by the ETSI General Assembly #42. The present ETSI Guide on IPRs embodies most of these recommendations.

A revised version of the Clause 4.1 of the ETSI IPR Policy was adopted by the 46th General Assembly in November 2005. This revision was induced by the EC DG COMPETITION in its concern to generate a general awareness of the risk of "patent ambush" situation in the standard making process. The EC DG COMPETITION rationale behind the changes is given in section 4.5 of the present Guide.

Foreword

Intellectual property plays an important role in standardization, especially in the telecommunications and electronic communications sector. In that context, the likelihood of having Intellectual Property Rights (IPRs) incorporated into ETSI Deliverables became critical after a few years of existence of ETSI. This tension (proprietary nature of IPRs versus wide dissemination of standards) was minimized with the adoption by the ETSI Membership of the ETSI IPR Policy as found in Annex 6 to the ETSI Rules of Procedure.

In the preparation of standards, IPR issues may arise. It is important for all parties involved in the ETSI standards-making process to be aware of their responsibilities and that there is good co-operation between all parties.

This guide is intended to help ETSI Members and any other party involved in ETSI's standardization activities (e.g. Members, Technical Body Chairmen, Secretariat, etc.) to understand and implement the Institute's IPR Policy.

This guide provides explanatory information on how to handle IPR matters in ETSI and does not replace the ETSI IPR Policy which takes precedence in all cases.

This guide has been endorsed by the Board but does not have the same official status as the Statutes, the Rules of Procedure or the Technical Working Procedures.

Should you (the reader) have any difficulty with provisions of this guide or with any practical aspects of the Policy which are not answered by this guide, please do not hesitate to contact the ETSI Secretariat (hereafter called simply "Secretariat").

2 Importance of timely disclosure of Essential IPRs

The main problems for ETSI as a standards body which may arise from "late disclosures" include:

- Licenses for Patents which have been disclosed late and are not available at all, or,
- Licenses for Patents which have been disclosed late and which are available, but not on Fair, Reasonable and Non-Discriminatory (FRAND) terms, i.e. the company is unwilling to make a "FRAND" undertaking/licensing declaration.

If the above problems cannot be satisfactorily resolved, then ETSI has to change the standard, which in some extreme cases could even include the need to start again with the development of that standard.

NOTE 1: Definitions for "Timeliness" or "Timely" cannot be agreed because such definitions would constitute a "change to the Policy".

NOTE 2: The following description of Intentional Delay has been noted:

"Intentional Delay" has arisen when it can be demonstrated that an ETSI Member has deliberately withheld IPR disclosures significantly beyond what would be expected from normal considerations of "Timeliness".

This description of "Intentional Delay" should be interpreted in a way that is consistent with the current ETSI IPR Policy. In complying with the requirements of timeliness under Clause 4.1 of the IPR Policy, Members are recommended to make IPR disclosures at the earliest possible time following their becoming aware of IPRs which are, or are likely to become, Essential.

NOTE 3: "Intentional Delay", where proven, should be treated as a breach of the IPR Policy (Clause 14 of the ETSI IPR Policy) and can be sanctioned by the General Assembly.

2.1 Members Duties

2.1.1 Responding to Calls for IPRs performed in Technical Body meetings

Members participating in Technical Bodies should respond at the earliest possible time to the Call for IPRs performed by Technical Body Chairmen at the beginning of each meeting, based on the working knowledge of their participants.

Furthermore, the call for IPRs acts as a reminder of the Member's obligations under the IPR Policy and is performed to foster the disclosure of Essential IPRs in a timely fashion.

Members having IPR portfolios should improve their internal IPR co-ordination processes to ensure, as far as possible, that their participants in Technical Bodies are aware of any alleged-essential IPR the company may have (related to the on-going work on a particular ETSI Standard or Technical Specification), that they understand their obligations, and that they know how to discharge them.

Members are encouraged to make general IPR undertakings/licensing declarations that they will make licenses available for all their IPRs under FRAND terms and conditions related to a specific standardization area and then, as soon as feasible, provide (or refine) detailed disclosures. This process reduces the risk of the standards making process being blocked due to IPR constraints.

2.1.2 Disclosure and licensing of patents from a PATENT FAMILY

The deemed fulfilment in Clause 4.3 of the IPR Policy of the obligations pursuant to Clause 4.1 in respect of all existing and future members of a PATENT FAMILY is only applicable to the extent that the IPR owner has the right to make the IPR undertaking/licensing declaration pursuant to Clause 6.1

Approved by the IEEE-SA Board of Governors February 2011

IEEE-SA Standards Board Bylaws

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3 Park Avenue, New York, NY 10016-5997, USA

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“*Submitter*” when used in reference to a Letter of Assurance shall mean an individual or an organization that provides a completed Letter of Assurance. A Submitter may or may not hold Essential Patent Claims.

6.2 Policy

IEEE standards may be drafted in terms that include the use of Essential Patent Claims. If the IEEE receives notice that a [Proposed] IEEE Standard may require the use of a potential Essential Patent Claim, the IEEE shall request licensing assurance, on the IEEE Standards Board approved Letter of Assurance form, from the patent holder or patent applicant. The IEEE shall request this assurance without coercion.

The Submitter of the Letter of Assurance may, after Reasonable and Good Faith Inquiry, indicate it is not aware of any Patent Claims that the Submitter may own, control, or have the ability to license that might be or become Essential Patent Claims. If the patent holder or patent applicant provides an assurance, it should do so as soon as reasonably feasible in the standards development process once the PAR is approved by the IEEE-SA Standards Board. This assurance shall be provided prior to the Standards Board’s approval of the standard. This assurance shall be provided prior to a reaffirmation/stabilization if the IEEE receives notice of a potential Essential Patent Claim after the standard’s approval or a prior reaffirmation/stabilization. An asserted potential Essential Patent Claim for which an assurance cannot be obtained (e.g., a Letter of Assurance is not provided or the Letter of Assurance indicates that assurance is not being provided) shall be referred to the Patent Committee.

A Letter of Assurance shall be either:

- a) A general disclaimer to the effect that the Submitter without conditions will not enforce any present or future Essential Patent Claims against any person or entity making, using, selling, offering to sell, importing, distributing, or implementing a compliant implementation of the standard; or
- b) A statement that a license for a compliant implementation of the standard will be made available to an unrestricted number of applicants on a worldwide basis without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination. At its sole option, the Submitter may provide with its assurance any of the following: (i) a not-to-exceed license fee or rate commitment, (ii) a sample license agreement, or (iii) one or more material licensing terms.

Copies of an Accepted LOA may be provided to the working group, but shall not be discussed, at any standards working group meeting.

The Submitter and all Affiliates (other than those Affiliates excluded in a Letter of Assurance) shall not assign or otherwise transfer any rights in any Essential Patent Claims that are the subject of such Letter of Assurance that they hold, control, or have the ability to license with the intent of circumventing or negating any of the representations and commitments made in such Letter of Assurance.

The Submitter of a Letter of Assurance shall agree (a) to provide notice of a Letter of Assurance either through a Statement of Encumbrance or by binding any assignee or transferee to the terms of such Letter of Assurance; and (b) to require its assignee or transferee to (i) agree to similarly provide such notice and (ii) to bind its assignees or transferees to agree to provide such notice as described in (a) and (b).

This assurance shall apply to the Submitter and its Affiliates except those Affiliates the Submitter specifically excludes on the relevant Letter of Assurance.

If, after providing a Letter of Assurance to the IEEE, the Submitter becomes aware of additional Patent Claim(s) not already covered by an existing Letter of Assurance that are owned, controlled, or licensable by

the Submitter that may be or become Essential Patent Claim(s) for the same IEEE Standard but are not the subject of an existing Letter of Assurance, then such Submitter shall submit a Letter of Assurance stating its position regarding enforcement or licensing of such Patent Claims. For the purposes of this commitment, the Submitter is deemed to be aware if any of the following individuals who are from, employed by, or otherwise represent the Submitter have personal knowledge of additional potential Essential Patent Claims, owned or controlled by the Submitter, related to a [Proposed] IEEE Standard and not already the subject of a previously submitted Letter of Assurance: (a) past or present participants in the development of the [Proposed] IEEE Standard, or (b) the individual executing the previously submitted Letter of Assurance.

The assurance is irrevocable once submitted and accepted and shall apply, at a minimum, from the date of the standard's approval to the date of the standard's withdrawal.

The IEEE is not responsible for identifying Essential Patent Claims for which a license may be required, for conducting inquiries into the legal validity or scope of those Patent Claims, or for determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance, if any, or in any licensing agreements are reasonable or non-discriminatory.

Nothing in this policy shall be interpreted as giving rise to a duty to conduct a patent search. No license is implied by the submission of a Letter of Assurance.

In order for IEEE's patent policy to function efficiently, individuals participating in the standards development process: (a) shall inform the IEEE (or cause the IEEE to be informed) of the holder of any potential Essential Patent Claims of which they are personally aware and that are not already the subject of an existing Letter of Assurance, owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents; and (b) should inform the IEEE (or cause the IEEE to be informed) of any other holders of such potential Essential Patent Claims that are not already the subject of an existing Letter of Assurance.

A12986 - 23665

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**UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN**

APPLE INC.,)	
)	
Plaintiff,)	
)	
v.)	Case No. 11-cv-178-bbc
)	
MOTOROLA)	
MOBILITY, INC.,)	
)	
Defendant.)	
)	
)	
)	

MOTOROLA'S MOTION FOR CLARIFICATION

INTRODUCTION

On October 29, 2012, this Court issued an order ruling on the parties' outstanding motions *in limine*, some of which relate to the scope of trial and to potential relief that may be granted by this Court.. *See*, Dkt. No. 424. The Court has determined that if Apple establishes that Motorola breached its obligations with IEEE and ETSI (specifically the FRAND obligations), the Court may allow Apple to seek specific performance as a remedy under the circumstances of this case. *See*, Dkt. 424 at 8. The Court noted that "it makes little sense to order the parties to continue negotiating a license when they have been unable to reach an agreement through five years of negotiation." *Id.*¹ For purposes of this Motion, Motorola seeks clarification with respect to the contract and terms to which specific performance may apply in the event the Court does "determine license terms." *Id.* at 9. If the Court intends to resolve the dispute between Motorola and Apple regarding the Motorola ETSI and IEEE essential patents at

¹ Motorola respectfully disagrees with the Court that it either has jurisdiction or will have the information required to determine a FRAND rate or FRAND terms for the portfolios at issue and intends to demonstrate this at trial.

issue by establishing licensing terms, the Court must also enforce those terms against Apple and require it to pay the license fees established by the Court for all worldwide sales (both past and future) of devices practicing the ETSI and IEEE standards at issue. Otherwise, Apple would improperly obtain an advisory opinion from this Court. As discussed below, this case is different *Microsoft v. Motorola* in that Microsoft has explicitly represented that it is "ready and willing" to accept the FRAND rate Judge Robart will determine.

The Court previously held that the "contracts" at issue are the ETSI and IEEE policies to which the Court previously held Apple to be a third party beneficiary. Further, the Court has specifically limited these claims to the commitments for UMTS, GPRS and 802.11.

Apple's breach of contract claims are premised on Motorola's commitments to ETSI and IEEE with respect to certain standards, including ETSI's Universal Mobile Telecommunications System standard, the General Packet Radio Service functionality of ETSI's Global System for Mobile Communications standard and the IEEE's 802.11 standard.

See, Dkt. No. 424 at 13. In the event Motorola is found to be in breach of its ETSI and IEEE FRAND obligations and this Court establishes "license terms," then Apple must be required in that same context to accept the license to Motorola's essential patents on the license terms established by this Court. The concerns regarding inefficiency and continued patent infringement litigation between Apple and Motorola can only be addressed (in the event Motorola is found to be in breach) if the remedy of specific performance binds Apple insofar as Apple is required to pay the license fee for all accused devices. These devices include all of Apple's worldwide past and future sales of all models of the iPhone and iPad as well as any other devices compliant with the relevant standards. The Court would have to exclude sales in Germany – where the parties have negotiated a license agreement and have submitted the to the Orange Book proceedings in that jurisdiction to establish the royalty rate. In order for this Court

to fashion a meaningful remedy of specific performance for Motorola's alleged breach, Apple must be bound to pay the license terms – including, but not limited to, the geographic scope and applicable time period for payment.

ARGUMENT

In the October 29, 2012 order, this Court stated as follows:

Unless and until Motorola gives Apple a fair license to its declared-essential patents, Apple will continue to face the threat of patent infringement litigation from Motorola. It would be highly inefficient to require Apple to bring a new lawsuit for monetary damages or declaratory relief each time Motorola sues it for patent infringement. Additionally, it makes little sense to order the parties to continue negotiating a license when they have been unable to reach an agreement through five years of negotiating.

See, Dkt. 424 at 8. It necessarily follows that unless and until Apple is required to pay the license terms established through the remedy of specific performance, the continued patent infringement litigation between the parties would be an inevitability. As this Court is aware, the only mechanisms for Motorola to recover royalties for patent infringement of ETSI and IEEE essential patents from Apple would be either: (1) through this litigation, or (2) by filing patent infringement litigation for all of the hundreds of Motorola declared essential patents applicable to the standards at issue in this case. If the Court believes a remedy of specific performance is necessary to avoid the inevitable continued litigation between these parties, the Court must also require Apple to pay the "licensing terms" established in that event. Of course, Apple is not entitled to this remedy if it cannot establish Motorola's breach as a threshold matter.

As the Court notes in its 10/29/12 Order at 9, "both ETSI and IEEE have declared their unwillingness to assist parties in determining license terms or in resolving disputes between the parties." *Id.* at 9. The Court also cites an ETSI Guide stating that "specific licensing terms and negotiations are commercial issues between the companies and shall not be addressed within

ETSI." *Id.* (internal citations omitted). While Motorola maintains that the specific licensing terms between Apple and Motorola for the Motorola portfolios should be considered "commercial issues between the companies" resolved through negotiation, if this Court intends to effectively establish a patent license agreement between Motorola and Apple, it must require Apple to comply with that license agreement. If not, the license agreement established by this Court (and its concomitant licensing terms) would be purely advisory and would not lead to any resolution of any portion of the dispute between the parties. In other words, if Apple is seeking licensing terms, it must be ready and willing to pay for the patent licenses on those same terms it seeks.

In its October 29 Order, this Court cited the District Court for the Western District of Washington, noting that Judge Robart "explained recently in a similar case involving Motorola's license commitments to IEEE" why Judge Robart was willing to set a FRAND range and rate for the patents at issue in that case. Dkt No. 424 at 9 (citing *Microsoft Corp. v. Motorola, Inc.*, Case No. C10-1823JLR, 2012 WL 4827743, *6 (W.D. Wash. Oct. 10, 2012)). However, the critical procedural and substantive distinction between the Microsoft/Motorola case pending before Judge Robart and this case (currently) is that Microsoft (for its part) has repeatedly affirmed (and the court has so held) that Microsoft: (1) needs a license, and (2) is ready and willing to pay the license terms established by that court. *See, Microsoft Corp. v. Motorola, Inc.*, Case No. C10-1823JLR, 2012 WL 4827743, *8 (W.D. Wash. Oct. 10, 2012) ("Microsoft has repeatedly represented to the Court that it believes it needs a license and that it is ready and willing to accept a license to Motorola's essential patents on RAND terms."); *See, Microsoft Corp. v. Motorola, Inc.*, Case No. C10-1823JLR, 2012 WL 2030098, *9 (W.D. Wash. June 6, 2012)

("Microsoft has stated to this court that not only does it believe it needs a license, it is ready and willing to accept a license on RAND terms.") (internal citations omitted).

As a threshold matter, Apple's Complaint in this action does not seek to establish license terms for Motorola's relevant standards essential patents. The only allegation in Apple's Complaint that even refers to specific performance states nothing about establishing licensing terms between Apple and Motorola. *See*, Apple Cplt. Dkt. 110 ¶197(h). The only basis Apple has ever cited for Apple's recent request for this Court to set a FRAND is its request for relief seeking "an order ordering Motorola to specifically perform its contractual commitment to license its essential patents on F/RAND terms." *Id.* Motorola has in good faith always understood this request to relate to an obligation to negotiate on FRAND terms. Motorola understands Apple's current desire to seek a FRAND rate to be based on its desire to obtain the relief that Microsoft is requesting in *Microsoft v. Motorola* in Washington - namely that the court draft a license for the parties. Judge Robart has conditioned his potential consideration of such relief on Microsoft's representation that it will absolutely take a license on the terms the that the court sets. If Apple seeks the potential remedy Microsoft seeks in its case, the Apple must at least make the same commitment Microsoft made to accept the license terms and pay.

Finally, Motorola respectfully reserves its rights to object to the setting of a FRAND rate as a "license term" under Apple's request for specific performance. This constitutes a change in the scope of this case. The expert testimony in the *Microsoft v. Motorola* case will address the actual patents at issue in that case under those two standards and the technological value of each of the patents involved in the license the court intends to establish. In contrast, neither party will present to this Court any testimony regarding the subject matter, technology or value of almost all of the patents at issue in ETSI and IEEE Motorola portfolios applicable to Apple's devices.

As this Court noted in its October 29, 2012 Order, "as Apple's own experts have testified, the value of Motorola's declared-essential patents should be determined by an assessment of their value over any non-infringing alternatives at the time Motorola's patents were incorporated into the standard." *See*, Oct. 29, 2012 Order, Dkt. 424 at 17-18. Tellingly, Apple will be unable to offer this evidence for most of the patents in Motorola's portfolios. If Apple had actually pled a claim for FRAND rate-setting relief, Motorola could have offered technical expert testimony and/or other expert testimony on the value over non-infringing alternatives for the entire portfolio. Motorola has effectively been denied this opportunity. Although the Court declined to grant Motorola's motion *in limine* regarding Apple's failure of proof on the value of the relevant Motorola portfolios for purposes of establishing licensing terms, this is not simply a criticism of the methods used by Apple's experts. Instead, it is a failure of either party to present the evidence Apple's own expert believes is appropriate for the Court to establish a FRAND rate as a license term applicable to the parties. This failure of proof is a result of the fact that Apple added this request for a FRAND royalty rate-setting procedure well after expert disclosures. Motorola maintains its objection to this procedure because the Court cannot determine the value of the patents at issue in Motorola's IEEE and ETSI portfolios and should not establish the royalty rate for those patents.

CONCLUSION

For the reasons stated herein, Apple must commit to pay the FRAND rate set by the Court before it may seek the remedy of specific performance to set such a rate for Motorola's breaches. Otherwise, any such remedy would be advisory.

Dated: October 30, 2012

Respectfully Submitted,

MOTOROLA MOBILITY LLC

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**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN**

APPLE INC.,

Plaintiff,

v.

MOTOROLA MOBILITY, INC.

Defendant.

Case No. 11-CV-178-bbc

Hon. Barbara B. Crabb

APPLE'S OPPOSITION TO MOTOROLA'S MOTION FOR CLARIFICATION

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I. INTRODUCTION

For the third time in a month, Motorola attempts to redefine the scope of this FRAND trial, this time in the guise of a motion for “clarification.” Motorola’s eve-of-trial motion is one part improper request for reconsideration, and one part untimely request to amend its pleadings. Neither part should succeed.

Incredibly, Motorola bases its new motion on surprise—that despite Apple’s explicit request in the pleadings for an order of specific performance against Motorola “to license its essential patents on F/RAND terms,” and despite the fact that Motorola embraced the concept of a court-ordered RAND rate in the *Microsoft* case, Motorola never believed this Court could order such relief. *See* Motion at 5. Whether or not Motorola’s surprise is genuine and somehow explains its failure to offer expert testimony on what the FRAND rate should be in what it always knew was a litigation about FRAND, Motorola’s motion must fail because the Court has already rejected Motorola’s argument. Motorola twice moved to constrain the scope of the trial, first in its motions *in limine*, and next in its motion for guidance on the length of trial. The Court has resolved the issue. Motorola has no new basis to request reconsideration.

Next, Motorola’s motion includes an entirely new and unpled request for affirmative relief: that the Court compel Apple to pay Motorola cash immediately upon the Court setting the FRAND rate on Motorola’s portfolio. Motorola has never even hinted at this affirmative relief in any of its pleadings or discovery responses, and this request is contrary to Motorola’s continued insistence—even in the present motion—that the Court cannot set the FRAND rate. The contracts at issue do not support Motorola’s belated request. Motorola’s commitment to standard-setting organizations to offer a FRAND rate does not bind Apple to write a blank check and accept that offer. While Motorola points out that Microsoft agreed that Microsoft would

commit to pay Motorola at the conclusion of the *Microsoft* case, Motorola never made a similar request of Apple here, and thus it never became a condition of the Court's FRAND remedy. This part of Motorola's motion is untimely, is inconsistent with Motorola's pleadings, and should be rejected.

Apple has however been an outspoken leader in the industry on FRAND and has repeatedly urged that a rational and consistent framework for determining FRAND rates for wireless standards-essential portfolios must be set. Apple's actions in both licensing and litigation have matched its words in public. Because of that, Apple is willing to pay the FRAND rate this Court sets going forward if that rate is less than or equal to \$1 per unit for its worldwide sales of covered products, as further discussed below in Section II.D. This is the rate that Apple believes is appropriate in these circumstances, a rate that flows from Apple's articulated FRAND framework, and the only rate that can be supported by experts at this trial. To the extent the Court sets the rate higher than \$1 per unit, Apple reserves the right to exhaust all appeals and also reserves the right available to any party offered a license: the right to refuse and proceed to further infringement litigation. The Court has stated that it intends to set the "current fair license rate for purposes of specific performance." Dkt. No. 424 at 18. With regard to Motorola's request for an order requiring Apple to pay Motorola for the past (which is also beyond the scope of the specific performance remedy requested), Apple is confident that parties can negotiate a resolution once the Court sets a FRAND rate going forward.

II. ARGUMENT

A. The Court Should Deny Motorola's Attempt to Seek Reconsideration on the Scope of the FRAND Trial

Under the guise of a motion for clarification, Motorola submits a motion that is in large part a motion for reconsideration that does not meet this Court's requirement to introduce new

evidence or argument. Motorola repeats the arguments it lost three days ago in its motions *in limine* and Daubert motions. *Compare* Dkt. No. 444 (Motion for Clarification) at 5-6 (alleging that setting the rate exceeds Apple’s evidence) *with* Dkt. No. 386 (Motion for Guidance on Trial Schedule) at 2 (alleging that setting a FRAND rate “exceeds the scope of the . . . evidence and expert reports in this matter.”) But Motorola’s motion lacks any new evidence or argument that would cause this Court to reconsider its 57-page opinion.

It is Motorola, not Apple, that suffers from a lack of proof on key FRAND-rate issue. This Court held on Monday that it will set the FRAND rate that Motorola must offer to Apple (provided that Apple proves the breach of Motorola’s contracts with ETSI and IEEE). Dkt. 424 (MIL Order of Oct. 29, 2012) at 10. The Court further held that Motorola’s only expert, Dr. Leonard, “did not offer any opinion about what particular rate or range or rates would constitute a FRAND royalty” and thus cannot testify about a particular rate at trial. *Id.* at 49. Faced with these significant adverse holdings, Motorola attempts now to salvage its case in which it failed to provide a competent evaluation on the appropriate FRAND rate.

Apple has consistently and methodically pursued and amassed evidence on what the proper FRAND rate is. In the spring of this year, Apple’s expert, Louis Berneman, submitted an expert report, which in no uncertain terms set forth Apple’s view of the proper FRAND rate. He stated: “Thus a royalty payment of no more than \$1.01 per (iPhone) unit would have been consistent with Motorola’s F/RAND obligations.” Dkt No. 447-2 (Berneman Rpt. (Sept. 15, 2011)) at 55. Motorola thus could not have reasonably believed that Apple would not ask this Court to set the FRAND rate.

As Apple will show at trial next week, there is copious real-world evidence—including Motorola’s contemporaneous licenses—that establishes a ceiling for the FRAND rate Motorola

could charge Apple for Motorola's worldwide portfolio. That ceiling is \$1 per phone, which is more than Motorola was charging to Apple and others the moment the iPhone entered the market, more than Motorola has received in value from its competitors, and substantially more per-patent than Apple has paid for its other standards-essential licenses. Apple's experts and employees will explain why this framework is proper and how Motorola has utterly failed to provide a fair offer on these terms, which Apple asks the Court to set. Motorola's renewed arguments about lack of evidence on the proper FRAND rate continue to be baseless and must again be rejected.

B. Motorola's Request That the Court Compel Apple to Accept Motorola's Court-Ordered Rate Is Outside the Scope of Motorola's Pleadings and Discovery Responses

Motorola's eleventh-hour request to the Court that it compel Apple to pay immediately on the FRAND rate the Court may set is the first time Motorola has raised this request for affirmative relief. Motorola's pleadings contained no such request for specific performance. Motorola has not pursued this claim in discovery, and has not stated it in any of its discovery responses. Not even Motorola's proposed special verdict filed on Monday included the request for this relief. *See* Dkt. No. 438 (Motorola's Special Verdict Form). In fact, Motorola still continues to strenuously object to the Court's ability to even set the FRAND rate. Dkt. No. 444 (Motion for Clarification) at 5-6. Moreover, this Court has consistently made it clear that it will not allow the parties to expand the scope of this case by inserting new unpled theories, let alone new forms of affirmative relief. Dkt. No. 424 (Order on MILs) at 37.

Even if the request were timely, Motorola cannot support an argument that Apple is somehow bound to perform under *Motorola's contract* with the SSOs, which requires only that *Motorola* offer a FRAND license. The remedies in this case focus on Motorola's obligation to offer a FRAND license *to Apple*. In fact, the Court repeatedly so stated:

- Apple is seeking "an order requiring **Motorola to offer a [FRAND] license to Apple.**"

- Apple seeks “an order requiring specific performance of **Motorola’s contractual commitments.**”
- “Apple intends to ask the court to order **Motorola to offer a license** for its standards-essential patents to Apple on fair, reasonable and nondiscriminatory terms.

Dkt. No. 424 (MIL Order of Oct. 29, 2012) at 5, 7 (emphases added).

Apple’s request is rooted in *Motorola’s* contracts with ETSI and IEEE to offer its essential patents on FRAND terms. Dkt. No. 194 (Summary Judgment Order of Aug. 10, 2012) at 46. Motorola’s commitment to the SSOs does not create a contractual obligation on Apple to accept the rate that Motorola offers, let alone to blindly accept any such offer and write a blank check before it even knows exactly what that offer is. The Court should therefore determine whether Motorola was required to offer the particular rate to Apple, not whether Apple had to accept that rate.

Motorola now suggests that the Court should be writing a full license at the end of this case. Dkt. No. 444 (Motion for Clarification) at 1-2. That is not what this case is about and Motorola’s assertion is directly contrary to Motorola’s positions stated as recently as last week and in this motion where it continues to argue that the Court cannot even set the FRAND rate. Apple has consistently pled, pursued evidence, and provided expert opinions aimed at the ultimate order that Motorola has breached its obligation to *offer* a FRAND rate, and that Motorola is obligated to offer Apple that particular rate. This Court acknowledged that in stating that Apple was seeking “the trial [that would] result in a determination of **a specific rate or range** that constitutes a fair, reasonable and nondiscriminatory license for Motorola’s patents and an order requiring Motorola to offer that license to Apple.” Dkt. 424 (MIL Order of Oct. 29, 2012) at 5 (emphasis added). The Court also held that it will determine “what **rate or range of rates** would qualify as a fair, reasonable and nondiscriminatory license offer for Motorola’s standards-essential patents. *Id.* at 10 (emphasis added). In fact, contrary to Motorola’s

assertions, that is what the *Microsoft* case is about as well: “Again, the court reiterates that the November 13 trial will not result in the creation of a RAND license agreement, but instead will determine a RAND royalty range and a RAND royalty rate.” Dkt. No. 420-16 (Order of Oct. 10, 2012 in *Microsoft Corp. v. Motorola, Inc.*, Case No. C10-1823JLR (W.D. Wash.)) at 17-18. Apple has also made it abundantly clear that the rate at issue is one on Motorola’s standards-essential portfolio. *See, e.g.*, Dkt. No. 419 (Apple’s Opp. to Motorola’s Motion for Guidance on Trial Schedule) at 17-18. Apple is not asking the Court to execute a cross-license between the parties, and no party is asking the Court to set a FRAND rate for Apple’s standards essential portfolio. *Id.*

What Motorola actually seeks is a voluntary commitment by Apple to pay Motorola upon the completion of the case. Motorola could have made such a request months ago—the issue could not have been a surprise given the parallel nature of these cases and the fact that Motorola is represented by the same counsel in both—but Motorola chose not to. It is simply too late to ask the Court to compel this relief.

C. Any Court-Set FRAND Rate Applies Worldwide and Should Not Carve Out Germany

Motorola not only now seeks a fully executed and paid license with Apple at the conclusion of the case, it seeks for the first time a carve-out of Germany from a “worldwide” FRAND license. There can be no question that the FRAND rate this Court sets should apply globally. First, Motorola initiated and pursued its negotiations with Apple based on its worldwide standards-essential portfolio. As this Court noted, “[a]t the initial meeting between the companies, Motorola presented information to Apple concerning its licensing program and stated that its standard royalty rate was 2.25% for a worldwide license to its portfolio of standards-essential patents.” Dkt. No. 194 (Summary Judgment Order of Aug. 10, 2012) at 12.

Motorola's contract at issue in fact obligates it to offer a license to its worldwide portfolio. *See, e.g.*, Dkt. No. 439 (Apple's Proposed Findings of Fact) at 7 (quoting IEEE's request to members to provide "a statement that a license ... will be made available to an unrestricted number of applicants on worldwide basis."). Even in this motion Motorola refers to worldwide sales. Dkt. No. 444 (Motion for Clarification) at 2.

Second, there is no basis to exclude Germany—or any other country—from the reach of the FRAND rate this Court may set. This litigation, filed March 11, 2011, arose from the 745 ITC Investigation, commenced at October 6, 2010. Thus, this litigation commenced years before the start of the Orange Book "rate setting" proceedings Motorola references although the German patent infringement proceedings had been ongoing before that. In fact, the license Motorola refers to was not executed until late April 2012, and the rate-setting proceeding commenced recently. (Indeed, this litigation substantially precedes even the German infringement actions that prompted that license.) Accordingly, Apple expects that the judgment of this Court will moot the later-filed German rate-setting action. Therefore, before this motion there has never been any suggestion from Motorola that the Court would somehow be prevented from resolving this FRAND dispute on a worldwide basis, and Motorola's one-sentence argument in this Motion does not change that. *See, e.g., Microsoft Corp. v. Motorola, Inc.*, Case No. 12-35352, 2012 U.S. App. LEXIS 20349, at *30 (9th Cir. Sept. 28, 2012) (upholding the district court's anti-suit injunction against Motorola's German proceeding, the Court confirmed the primacy of the U.S. contract action that included Motorola's contract with an SSO to offer a license on worldwide basis and thus including patent rights at issue in Germany as well).

D. Although It Is Not So Obligated, Apple Is Willing To Pay the FRAND Rate of Not More Than \$1 Per Unit Going Forward

Apple has publicly spoken about the necessity for setting a rational and reciprocal framework for assessing the FRAND rate on wireless declared standards-essential portfolios. In fact, Apple has been a leader in adhering to FRAND policies for licensing cellular standards-essential patents on rates proportional to the share of standards patents and on common bases that actually embody the standardized technology. Apple's litigation conduct has been fully consistent with its public statements regarding the proper approach to evaluating the FRAND rate. And as an industry leader, Apple conducts itself responsibly and owns up to its own public statements.

Although Apple does not believe that Motorola may now seek an order compelling Apple to pay the rate this Court sets, Apple would be willing to pay a Court-ordered FRAND rate of less than or equal to \$1 per covered product on the going-forward basis. This is the rate that Apple believes is appropriate in these circumstances for Motorola's portfolio of cellular and WiFi essential patents. It is also consistent with the reasoned framework Apple has publicly articulated, and the only rate that can be supported by the evidence at this trial. Because neither party is asking this Court to draft a fully executable cross-license with all the necessary terms, Apple does expect that further negotiation will need to take place before the parties actually come to an agreement, covering topics such as the FRAND value of Apple's cross-license, the role of Apple's existing license to Motorola's portfolio through Qualcomm, and the treatment of past sales. That this is so does not by any measure make this trial "advisory," as Motorola contends. Motorola's contracts require it to perform a discrete legal act – offer a FRAND rate to Apple – and an order requiring Motorola to do just that is among the concrete relief Apple seeks as remedy here. Further, Apple's expectation is that the Court's judgment on this point will have

a palpable, powerful effect on the parties' broader, ongoing global settlement discussions (extending beyond standards-essential patents), a substantial sticking point in which is the very question the Court will adjudicate: what are Motorola's standards-essential patents worth?

Motorola cannot offer evidence at this trial that the rate should be higher than \$1 per phone, but to the extent the Court sets the rate higher than \$1 per unit, Apple reserves the right to exhaust all appeals and needs also to reserve the right available to any party offered a license: the right to refuse and proceed to further infringement litigation. Make no mistake, that is not an outcome Apple desires. The parties have spent an exhausting two years litigating against each other around the world. But if the Court were to set, for example, the rate Motorola is seeking (2.25% of Apple's covered product revenue), that would amount to billions of dollars per year. That is orders of magnitude more than Apple is paying for even substantially larger standards-essential patent portfolios. Indeed, over several years such a figure would eclipse the recent entire cost of acquisition of Motorola. In such circumstances, Apple may need Motorola to demonstrate that its *declared* essential patents are *in fact* essential patents and worth that amount of money, a hurdle Motorola has thus far been unable to clear with what are presumably its best patents.

III. CONCLUSION

For the foregoing reasons, Motorola's "motion" should be denied.

Dated: October 31, 2012

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Samuel F. Ernst, an attorney, do hereby certify that I caused a copy of the foregoing to be electronically filed with the Court and served on all parties on October 31, 2012 using the Court's electronic case filing system.

By: /s/ Samuel F. Ernst

Samuel F. Ernst

A24664 - 27343

REMOVED DUE TO CONFIDENTIAL MATERIAL

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN**

APPLE INC.,

Plaintiff,

v.

MOTOROLA MOBILITY, INC.

Defendant.

Case No. 11-CV-178-bbc

Hon. Barbara B. Crabb

APPLE’S RESPONSE TO THE COURT’S ORDER OF NOVEMBER 2, 2012

Apple is acutely sensitive to, and shares, the Court’s desire that the result of this trial be meaningful in resolving the extensive disputes between the parties. Apple believes that, under Apple’s original conception of the trial, it would have been so. Motorola’s refusal to make a FRAND offer was, in Apple’s view, the single greatest impediment to a successful negotiation of a worldwide license that would have eliminated all litigation between the parties, and Apple believed that, if the Court set such a FRAND rate, such a successful negotiation was likely. That is the reason Apple brought this case and prepared it for trial as it did. Motorola’s motion for “clarification” filed on October 30 sought, for the first time, to bind Apple to whatever FRAND rate the Court set, relief it had not pled and could not have pled given the claims in the case.

When the Court asked Apple on late Tuesday afternoon, October 30, to commit by noon the next day as to whether it would be bound by whatever FRAND finding the Court made, Apple agreed but with caveats as to the amount and scope. The Court’s order dated November 2 states that, because Apple would not make an unconditional commitment to be bound, the Court would reverse its prior decisions regarding the availability of specific performance and

declaratory relief should Apple prove that Motorola breached its FRAND commitments, and questioned whether the trial should proceed at all. This submission is in response to the Court's request that the parties comment on the November 2 order.

The fundamental reason that Apple placed conditions on the commitment the Court asked for is that it would have been one-sided, because Motorola would have no similar obligation to pay a FRAND rate for Apple's standards-essential patents (because Motorola had not brought a similar action seeking to establish a FRAND rate for Apple's patents). Thus, even with the unconditional commitment the Court sought, the disputes between the parties regarding standards-essential patents would not have been fully resolved. Apple agrees as to the benefit of a process that effectively binds the parties, but not one that does so only in one direction.

Accordingly, as requested by the Court's November 2 order, Apple makes the following proposal that it believes will address the Court's concerns that the trial effectively resolve the parties' disputes. Apple's proposal is in two alternative forms, depending on the Court's preference:

- (1) the trial proceed as planned starting tomorrow with the understanding that the Court will set a FRAND rate according to a methodology that both Apple and Motorola will agree to be bound by, thus effectively eliminating the disputes between the parties as to their standard essential patents; or
- (2) if Motorola is unwilling to agree to be bound by the methodology adopted by the Court in option one, the Court defer the trial for a limited period (e.g., 6-9 months) to allow the development of a record as to both parties' standard essential patents such that the Court could determine in one proceeding what the FRAND

payment of each party should be, and both parties would agree to be bound by that determination.

The second alternative allows for the possibility that the Court may conclude that the Chi Mei rate is the appropriate FRAND measure for Motorola's patents because it involves the same patents, the same products, and the same parties, but that a different rate or methodology would be appropriate as a FRAND measure for Apple's standards-essential patents.

The only conditions that Apple would attach to its commitment under either scenario are: (1) that the license in both directions be worldwide; (2) that both parties preserve their rights to appeal the Court's ruling, such that both parties' payment obligations would begin after such appeals are concluded; and (3) that the FRAND royalty obligation apply to both parties only to otherwise unlicensed products (in other words that neither party should have to pay twice for the same product).

Apple believes this proposal addresses the concerns expressed by the Court. The reasons for this are set forth below, and Apple will be prepared to discuss this in more detail on Monday morning as directed.

A. The Court May Issue a Declaratory Judgment Setting the FRAND Rate Under Apple's Proposal

The Court can issue a declaratory judgment setting the FRAND rate for Motorola's patents; and Apple agrees to be bound by the rate set by the Court if Motorola is similarly bound to pay the FRAND rate set for Apple's patents. As Apple pointed out in its opposition to Motorola's motion in limine to preclude Apple from seeking specific performance, the case law

recognizes that it is appropriate to grant declaratory judgment setting a contract price.¹ *See* Dkt. No. 377 at 9-10.

The Court has nonetheless suggested it will decline to exercise its discretion to hear Apple's request for declaratory relief on the basis that it will not fully resolve the dispute between the parties. *See* Dkt. No. 487 at 5. But if both parties are bound by the FRAND rates set by the Court, this remedy would effectively resolve the dispute between the parties regarding Motorola's infringement claims on its declared standards-essential patents, because Apple and Motorola would each have a cross-license to the other party's patents.

Accordingly, declaratory relief here is supported by one of the principal factors courts consider in determining whether to entertain declaratory relief. "[I]f the declaratory judgment will clarify and settle the disputed legal relationships and afford relief from the uncertainty and controversy that created the issues, it is usually resolved rather than dismissed." *NUCOR Corp. v. Aceros Y Maquilas de Occidente, S.A. de C.V.*, 28 F.3d 572, 578 (7th Cir. 1994). A court order setting the FRAND rate that the parties are bound to accept will resolve infringement claims by Motorola that were filed in 2010 that remain alive on appeal; Apple would have a license to Motorola's asserted patents. It would further resolve the issue that the parties have been disputing in licensing negotiations since Apple released the iPhone in 2007: what is the FRAND rate for Motorola's declared standards-essential patent portfolio? And Motorola's

¹ *See, e.g., John Hancock Mut. Life Ins. Co. v. Webcor, Inc.*, 311 F.2d 701, 705 (7th Cir. 1962) (holding that the court had jurisdiction to grant plaintiff a declaration setting price the of stock in a contract for the purchase of the stock because it would amount to "specific relief through a decree of a conclusive character"); *Cain Rest. Co. v. Carrols Corp.*, 273 F. App'x 430, 436-37 (6th Cir. 2008) (granting plaintiff summary judgment on its declaratory judgment claim by construing a term in a real estate contract that would determine the proper purchase price).

commitment to be bound by the Court's determination of a FRAND rate for Apple's patents would mean the parties need not return to negotiations over that cross-license.²

Apple's request for declaratory relief does not raise the concerns the Court identified in connection with specific performance regarding whether Apple can show irreparable harm or an inadequate remedy at law. The Supreme Court has held that "engrafting upon the Declaratory Judgment Act a requirement that all of the traditional equitable prerequisites to the issuance of an injunction be satisfied before the issuance of a declaratory judgment is considered would defy Congress' intent to make declaratory relief available in cases where an injunction would be inappropriate." *Steffel v. Thompson*, 415 U.S. 452, 471 (1974) (internal citations omitted). Specifically, the Court held that "the Court of Appeals was in error when it ruled that a failure to demonstrate irreparable injury—a traditional prerequisite to injunctive relief, having no equivalent in the law of declaratory judgments precluded the granting of declaratory relief." *Id.* at 472 (internal citations omitted); *see also Tierney v. Schweiker*, 718 F.2d 449, 457 (D.C. Cir. 1983) ("Although a party must demonstrate irreparable injury before obtaining injunctive relief, such a showing is not necessary for the issuance of a declaratory judgment.").³

Declaratory relief likewise does not require a showing that there is no adequate remedy at law in monetary damages. "The existence of another adequate remedy does not preclude a

² Apple has repeatedly told Motorola in licensing negotiations that it is willing to grant a cross-license to its own declared standards-essential patents. Trial Ex. 434 (WI-178-002651) ("Apple has identified patents that are essential to one or more of the ETSI standards . . . Apple is willing to license these patents on fair reasonable and non-discriminatory terms as requested."); *see also* Dkt. No. 172 (Lutton Tr.) at 71:11-74:9.

³ Apple maintains its position that the relief it originally sought from the Court (declaratory relief and specific performance seeking to compel Motorola to make the FRAND offer its contracts required) is warranted for the reasons stated at the pretrial conference, but makes the alternative proposals herein to address the concerns expressed by the Court.

declaratory judgment that is otherwise appropriate.” Fed. R. Civ. P. 57. In *Tierney*, the district court had declined to entertain declaratory relief in part based on the conclusion that plaintiffs had available a \$1000 damages remedy. The D.C. Circuit reversed, holding that “the district court committed reversible error when it held that the availability of such alternative remedies precluded issuance of a declaratory judgment.” *Tierney*, 718 F.2d at 457.

The remaining discretionary factors courts consider in deciding to entertain declaratory relief counsel in favor of the Court hearing Apple’s claim here. There is no pending parallel state proceeding that would be affected by the Court’s granting of relief here. *See, e.g., Federal Reserve Bank of Atlanta v. Thomas*, 220 F.3d 1235, 1247 (11th Cir. 2000) (“It is an abuse of discretion . . . to dismiss a declaratory judgment action in favor of a state court proceeding that does not exist.”). And granting Apple the declaratory relief it seeks here would promote the settlement of (and in fact, would dispense with altogether) Motorola’s appeals of its declared-essential patent infringement claims against Apple. *See Capitol Records, Inc. v. Optical Recording Corp.*, 810 F. Supp. 1350, 1354-55 (S.D.N.Y. 1992). Because Motorola would also be bound to accept a FRAND rate for Apple’s essential patents, the declaration would also dispense with the need for any future licensing negotiations regarding the price of a cross-license.

B. The Court May Also Grant Specific Performance Setting the FRAND Rate Under Apple’s Proposal

1. If Motorola Is Permitted to Continue Filing Injunctive Relief Suits Against Apple Rather Than Fulfilling Its Obligation to Offer a FRAND License, Apple Will Suffer Irreparable Harm Not Compensable by Money Damages

If the Court declines to set the FRAND license rate for Motorola’s standards-essential patents, Motorola will be free to pursue additional infringement suits against Apple seeking injunctions or exclusion orders. Such actions would irreparably harm Apple.

The Court's order identifies two problems with Apple's allegation that an injunction or exclusion order against its products would cause Apple irreparable harm: (1) that an order setting the FRAND rate would not prevent Motorola from seeking further injunctions unless Apple agreed to pay the rate; and (2) that the harm that such injunctions would cause Apple might be compensable by money damages. *See* Dkt. No. 487 at 4. At this point, neither problem exists.

a) Because Apple Will Pay the Ordered Rate, Specific Performance Would Remove the Threat of Further Suits

The Court's first concern was motivated by the prospect that "if Apple refuses to be bound by the rate determined by the court, Motorola could continue to sue Apple for patent infringement and request injunctive relief." *Id.* Apple has removed that prospect by committing to be bound by the license rate set by the Court for Motorola's standards-essential patents, so long as Motorola is bound by the rate set by the Court for Apple's patents.

If the Court sets the FRAND rate that Apple is bound to pay for a license to Motorola's standards-essential patents, then Apple will pay that amount (offset by Motorola's payments for a license to Apple's essential patents) and receive a license. As a licensed party, Apple will no longer face the peril of suits for injunctive relief with which Motorola now threatens it.

b) Improper Injunctive and/or Exclusionary Sanctions Are Not Compensable By Money Damages

The second problem identified by the Court "is that Apple has provided no reason why its injuries would not be remedied by an award of money damages." *Id.* The reason that the harm of an improper injunction (or injunctions) against Apple could not be remedied by a money damage award is that such harm is not readily quantifiable. *See, e.g., In re Lewis*, 212 F.3d 980, 984 (7th Cir. 2000) ("Real but hard-to-quantify loss is a standard form of irreparable injury").

The harms caused by injunctive or exclusionary sanctions, specifically, have been held to be non-quantifiable and irreparable. *See Tessera, Inc. v. Advanced Micro Devices, Inc.*, C 05-4063, 2007 WL 3232441, at *6 (N.D. Cal. Nov. 1, 2007) (“There is a high likelihood that even a temporary ban on imports would disrupt the [] Defendants’ business and damage relations with their customers. These harms cannot readily be quantified, and thus are irreparable.”). The improper injunctive relief threatened by Motorola would cause Apple lost profits, loss of customers and potential customers, loss of goodwill, uncertainty in business planning, and uncertainty among customers and potential customers. These harms are by nature uncertain, not readily quantifiable, and not compensable by money damages. *See, e.g., Gateway E. Ry. Co. v. Terminal R.R. Ass’n*, 35 F.3d 1134, 1140 (7th Cir. 1994) (“showing injury to goodwill can constitute irreparable harm that is not compensable by an award of money damages”).

Additionally, the Court states that monetary damages would have been an adequate remedy because any determination at the liability stage that Motorola breached its contracts by failing to offer Apple a FRAND rate would effectively preclude Motorola from seeking injunctive relief by providing Apple with a defense to Motorola’s lawsuits. *See* Dkt. No. 487 at 4-5. As an initial matter, this demonstrates the necessity of trying the merits of Apple’s claim seeking nominal damages. *See* Section C, *infra*. Moreover, while a determination that Motorola had breached its FRAND obligations (accompanied only by an award of monetary damages) might supply Apple with a defense to future injunction suits, there is no guarantee that such a court sitting in equity would view that defense as dispositive.

2. The Public Interest Supports Specific Performance

The Court indicated that, in the absence of a commitment from Apple to pay an ordered rate for a license to Motorola’s standards-essential patents, it had particular concerns that the public interest weighed against granting specific performance setting the FRAND rate. The

Court expressed the concern that “it would not be in the public interest for the court to spend such enormous resources to determine a FRAND rate that may ultimately lead only to additional litigation,” *id.* at 5, since the practical effect of that relief would not justify the Court’s efforts in determining the rate. The parties’ commitment to be bound by the license rates set by the Court would resolve this concern. The practical effect of a *binding* determination of the FRAND rate will be to resolve the parties’ dispute and avert the inefficient outcomes of serial suits by Motorola for infringement and countersuits by Apple for breach of FRAND, accompanied by ongoing licensing negotiations. *See* Dkt. No. 424 at 8.

C. The Court Can Rule on Apple’s Breach of Contract Claims on the Basis that Apple Seeks Nominal Damages and Equitable Estoppel

Even if the Court declines to entertain Apple’s requests for specific performance and declaratory judgment, the trial should proceed on Apple’s breach of contract claims because Apple is entitled to nominal damages. “The victim of a breach of contract is always entitled to nominal damages if he proves a breach but no damages.” *Felton v. Teel Plastics, Inc.*, 724 F. Supp. 2d 941, 954 (W.D. Wis. 2010) (Crabb, J.) (internal quotations omitted); *see also Olympia Hotels Corp. v. Johnson Wax Dev. Corp.*, 908 F.2d 1363, 1372 (7th Cir. 1990) (same).⁴

Nor does the Court’s analysis with respect to injunctive relief and specific performance foreclose Apple’s ability to obtain the remedy that Motorola be equitably estopped from seeking

⁴ If the Court determines that Apple’s prayer for nominal damages is the only relief it will consider, the Court will retain diversity jurisdiction over this case. This is because “[t]he amount in controversy requirement . . . must be determined by the district court at the beginning of the suit, and is not dependent on subsequent dismissal of individual claims used to satisfy the jurisdictional threshold.” *Clark v. State Farm Mut. Auto. Ins. Co.*, 473 F.3d 708, 711 (7th Cir. 2007) (“Whether § 1332 supplies subject-matter jurisdiction must be ascertained at the outset; events after the suit begins do not affect the diversity jurisdiction.”); *see also Johnson v. Wattenbarger*, 361 F.3d 991, 993 (7th Cir. 2004).

injunctive relief on its declared standards-essential patents as a remedy for its FRAND violations. *See* Dkt. No. 110 (Apple’s First Am. Compl.) ¶¶ 134-141, 197(a).

D. Apple’s Failure to Disclose Claims Should be Tried

At the end of its order, the Court posits that its observations regarding the availability of equitable remedies for Apple’s FRAND claims “lead to the question whether a trial should be held regarding Apple’s other claims.” Dkt. No. 487 at 6. Apple respectfully disagrees that the Court’s concerns relating to Apple’s equitable FRAND remedies bear on Apple’s claims based on Motorola’s failure to disclose.

1. The Court’s Concerns Regarding Equitable Remedies Do Not Suggest That the Merits of Apple’s Failure to Disclose Claims Need Not Be Tried

In the course of its discussion of the continuing viability of Apple’s failure to disclose claims, the Court questions “why Apple believes that Motorola could obtain an injunction or exclusionary order against it after this court had determined that Motorola had injured Apple by breaching its duty to disclose its patents to ETSI.” *Id.* 487 at 7. Thus, the Court’s concern assumes that, and would only arise if, the Court rules on the merits of Apple’s failure to disclose claims. As with the FRAND claims, there is no guarantee that a determination of breach would be viewed by every other tribunal as a dispositive defense to an injunction or exclusion order in favor of Motorola.

2. An Order of Unenforceability Is the Only Remedy Available for Motorola’s Patent Misuse

As the Court notes, Apple seeks an order rendering Motorola’s ’898 patent unenforceable for patent misuse. While this relief is equitable in nature, it is the only remedy that may issue on a finding of patent misuse, which is itself an equitable doctrine. *See, e.g., B. Braun Medical, Inc. v. Abbott Labs.*, 124 F.3d 1419, 1427 (Fed. Cir. 1997) (When a patent holder commits patent

misuse, the patent is rendered “unenforceable until the misuse is purged.”). As Apple noted in its trial brief, misuse cannot be “purged” when the misuse consists of a failure to disclose essential IPR to a standard-setting organization. Dkt. No. 465 at 52-53. Motorola’s failure to disclose the ’898 patent until years after the standard was set resulted in that patent becoming perceived as a permanent part of the ETSI GPRS standard, allowing Motorola to seek to exclude parties from practicing the entire standard based on patent infringement actions involving only the ’898. Thus, the appropriate remedy here is to render the ’898 patent and any related successor patents unenforceable against all GPRS-compliant products. *See Qualcomm Inc. v. Broadcom Corp.*, 548 F.3d 1004, 1026 (Fed. Cir. 2008).

II. CONCLUSION

For the foregoing reasons, Apple respectfully requests that:

(1) The trial proceed as planned starting tomorrow with the understanding that the Court will set a FRAND rate according to a methodology that both Apple and Motorola will agree to be bound by, thus effectively eliminating the disputes between the parties as to their standard essential patents; or

(2) if Motorola is unwilling to agree to be bound by the methodology adopted by the Court in option one, the Court defer the trial for a limited period (e.g., 6-9 months) to allow the development of a record as to both parties’ standard essential patents such that the Court could determine in one proceeding what the FRAND payment of each party should be, and both parties would agree to be bound by that determination.

Dated: November 4, 2012

Respectfully submitted,

/s/ Samuel F. Ernst

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CERTIFICATE OF SERVICE

I, Samuel F. Ernst, an attorney, do hereby certify that I caused a copy of the foregoing to be electronically filed with the Court and served on all parties on November 4, 2012 using the Court's electronic case filing system.

By: /s/ Samuel F. Ernst
Samuel F. Ernst

COURTROOM MINUTES **TRIAL/EVIDENTIARY HEARING**

DATE: 11/5/12 DAY: Monday START TIME: 9:00 am TOTAL HOURS: 1st 57^m
 JUDGE/MAG: Crabb CLERK: Jacobson REPORTER: Swenson
 PROBATION OFFICER: _____ INTERPRETER: _____ SWORN: YES ☐ NO ☐
 CASE NUMBER: 11-cv-178-bbc CASE NAME: Apple v. Motorola Mobility

APPEARANCES:

PLAINTIFF(S):	<u>Jason Raofield</u>	DEFENDANT(S):	<u>Brian Cannon</u>
	<u>Rob Fram</u>		<u>Edward De Franco</u>
	<u>Matt Powers</u>		<u>Stephen Swedlow, Lynn Stath</u>

PROCEEDINGS: hearing; court finds that case can not proceed to trial on remaining issue; case dismissed
with prejudice.

PLAINTIFF(S) WITNESS

1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____
 7. _____
 8. _____
 9. _____
 10. _____

DEFENDANT(S) WITNESS

1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____
 7. _____
 8. _____
 9. _____
 10. _____

PLAINTIFF(S) DISPOSITIVE MOTION(S)

1. _____
 2. _____
 3. _____

GRANTED <input type="checkbox"/>	DENIED <input type="checkbox"/>	U/A <input type="checkbox"/>
GRANTED <input type="checkbox"/>	DENIED <input type="checkbox"/>	U/A <input type="checkbox"/>
GRANTED <input type="checkbox"/>	DENIED <input type="checkbox"/>	U/A <input type="checkbox"/>

DEFENDANT(S) DISPOSITIVE MOTION(S)

1. _____
 2. _____
 3. _____

GRANTED <input type="checkbox"/>	DENIED <input type="checkbox"/>	U/A <input type="checkbox"/>
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GRANTED <input type="checkbox"/>	DENIED <input type="checkbox"/>	U/A <input type="checkbox"/>

1ST BREAK 10:30 RESUME 11:10 2ND BREAK _____ RESUME _____
 3RD BREAK _____ RESUME _____ 4TH BREAK _____ RESUME _____
 ADJOURNMENT 11:37 am

A27884

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

APPLE INC.,

Plaintiff,

v.

MOTOROLA MOBILITY, INC.

Defendant.

Case No. 11-CV-178-bbc

Hon. Barbara B. Crabb

**APPLE'S BENCH MEMORANDUM REGARDING THE COURT'S JURISDICTION
AND THE NATURE OF ANY DISMISSAL**

In the final pretrial conference and in its November 2 Order, the Court questioned whether this case should be tried. The Court's question was premised on concerns regarding whether it would be an appropriate exercise of discretion to decide Apple's claims for equitable relief. Motorola repackaged that concern as a lengthy argument in its November 4 response to the November 2 Order and also argued that the Court lacks jurisdiction to hear Apple's claims. Apple's submission set forth a proposal whereby both parties would be bound to accept a FRAND rate set by the Court for a cross-license to each other's declared standards-essential portfolios. Apple submits this bench memorandum to address Motorola's argument that the Court lacks jurisdiction to hear Motorola's claims.

First, the Court has jurisdiction to hear Apple's claims both under Apple's proposal that the parties be bound by the FRAND rate and under Apple's previous conception of the case. Second, Apple requests that if the Court disagrees with Apple and dismisses the case, that it do so without prejudice. This is what the law requires and would ensure that Apple may assert its

In addition, the harm that Apple has sued to redress is the harm of not receiving a FRAND offer from Motorola. The order Apple is requesting would redress this harm because it would give Apple the power to accept Motorola's offer—a power that Apple currently lacks because of Motorola's breach.²

Finally, the case is ripe for adjudication because Motorola has refused to offer Apple a FRAND license, the parties' negotiations are at an impasse, and Motorola has sued Apple for patent infringement.³

If the Court Does Dismiss the Case, It Must Ensure That Its Dismissal Has No Res Judicata Effect by Dismissing Without Prejudice

Motorola argues that Apple's FRAND and untimely disclosure claims would be more appropriately raised as affirmative defenses to future patent infringement lawsuits. If the Court decides to dismiss Apple's claims, Apple seeks to ensure that such a dismissal may not operate as res judicata to bar Apple doing just that—raising its theories as affirmative defenses or counterclaims in future cases. Specifically, Apple requests that if the Court dismisses Apple's claims, it do so *without prejudice*.

² Accordingly, this case is not like *Microwave Acquisition Corp. v. FCC*, 145 F.3d 1410 (D.C. Cir. 1998) and the other redressability cases cited in Motorola's November 4 submission. In *Microwave* the plaintiff sued the FCC to challenging an order approving the transfer of one company to another. *See id.* at 1411. The plaintiff's injury of not being able to acquire the transferred company was not redressable, because even if the FCC did not approve the acquisition, it would not result in the transfer of the company to the plaintiff. Here, the Court's order would result in Motorola offering Apple the FRAND license to which it is entitled.

³ This case is therefore unlike *Clinton v. Acequia, Inc.*, 94 F.3d 568 (9th Cir. 1996), and the other ripeness cases cited in Motorola's November 4 submission. In *Clinton*, the parties had a contract requiring the defendant to liquidate a corporation by 1997. *See id.* at 572. Plaintiff sued to enforce the contract because the liquidation had not yet commenced, but because it was only 1996, the case was not ripe for adjudication. *See id.* Here, Motorola's contractual obligations adhered long ago, when it agreed to be bound by the SSO policies.

A28008 - 29312

REMOVED DUE TO CONFIDENTIAL MATERIAL

UNITED STATES DISTRICT COURT

FOR THE WESTERN DISTRICT OF WISCONSIN

* * * * *

APPLE, INC.,

Plaintiff,

-vs-

Case No. 11-CV-178-BBC

MOTOROLA MOBILITY, INC.,

Madison, Wisconsin

November 1, 2012

Defendant.

3:00 p.m.

* * * * *

STENOGRAPHIC TRANSCRIPT OF FINAL HEARING
HELD BEFORE DISTRICT JUDGE BARBARA B. CRABB,

APPEARANCES:

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Federal Court Reporter
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Madison, WI 53703 (608) 255-3821

1 industry before responding, and Motorola will prove, I
2 think at trial, that Apple never actually countered with
3 anything that Motorola could use, meaning something to
4 enter into a license agreement where the value received
5 is 2.25%.

6 THE COURT: And Mr. Powers, I still -- I know
7 I've vacillated on this, but I still remain skeptical
8 whether any court is qualified to pick a FRAND rate in
9 any situation and even whether it's proper for the Court
10 to do it. And I haven't really seen any compelling
11 justification from Apple to that effect. It doesn't
12 help -- in your motions in limine you left the
13 impression that picking a particular rate would be the
14 end. The Court would be done. Job completed. There
15 wouldn't be any monitoring of the negotiating process
16 and the Court would not have to entertain new claims
17 from the parties. But then in the response to
18 Motorola's motion for clarification, you advise the
19 Court and Motorola that you will not accept any rate in
20 excess of a dollar. So if I were to decide that the
21 rate should be \$3.10 or 27 cents or whatever, anything
22 -- I'm sorry, I should say \$3.10 or \$1.20, wouldn't you
23 walk away from the negotiation process and wouldn't we
24 be back at square one?

25 MR. POWERS: No, Your Honor, we wouldn't.

1 Slightly more precisely what we said was that we
2 couldn't write a blank check, not knowing what the
3 number is. That we reserve the right not to accept it,
4 depending on what it was. We did not say we would not.

5 That arises really from the relief that's sought
6 from the Court. The relief that's sought from the Court
7 is specific performance and/or a declaration about what
8 the FRAND rate is. That's what Motorola's contract with
9 the standard-setting bodies required it to do and that's
10 the relief we can seek.

11 Motorola's requested relief, which is to force
12 Apple to accept whatever rate that is, is both beyond
13 the scope of those contracts, which don't require that;
14 beyond the scope of its pleadings, which don't even
15 raise the question; and is also inconsistent with real
16 life. In real life, what Motorola's approach means is
17 that any party to a standard-setting body, like
18 Motorola, could declare thousands of patents that are
19 not in any way essential to that standard; that are
20 completely invalid, useless patents, and then with those
21 thousands of patents say okay, because we have thousands
22 and thousands of declared essential patents, our FRAND
23 rate is X, X being an unreasonable number given the
24 actual value of those patents. The rules of
25 standard-setting bodies and the rules of law don't

1 require a party to accept that offer.

2 Now what happens in real life is if Motorola makes
3 that demand and a party doesn't accept it, that party is
4 not licensed and the test of the value of those patents
5 arises in which patents Motorola chooses to say okay, we
6 think you are going to have to pay it and here's a
7 patent infringement case where you have no license
8 defense to test it.

9 The reality is that licenseless parties, either
10 right or wrong, about the value of the licensor's
11 patents. That is real life. That's not anything
12 different -- we're not asking for anything different
13 from real life. Any party has the right to say no when
14 someone makes an unreasonable demand. And if they're
15 making an unreasonable demand because their patents
16 really are not essential, even though they were declared
17 to be, or they're invalid, then in fact what they have
18 made as an offer, even though technically FRAND, because
19 of the number of their declared patents or whatever is
20 not -- does not, in fact, reflect their value.

21 We've already had a miniature test of that here.
22 They've taken their eight proud patents, their champion
23 patents, the ones they thought were the best, and
24 they've tried them and those patents have been declared
25 not essential, invalid, or both in almost every case.

1 None of the eight have survived.

2 And so there's a real world reason to think here
3 that if for some reason the FRAND rate is in Apple's
4 view grossly excessive, and I certainly don't have
5 authority to say Apple would accept anything more than
6 what we've said they would accept and have committed to
7 do, but common sense tells you that if it's a dollar and
8 a penny, the difference is greater than -- smaller than
9 if it's \$10. And so the logic would say Apple, like
10 every other person, make an offer of a standard-setting
11 set of patents, has the right to decide if that demand
12 is, in fact, something that it believes is worth it.

13 That's all we're asking for. We're asking for that
14 right to accept or not a FRAND offer, which has not yet
15 been made. That's all we can ask for in terms of
16 relief, because the relief is a specific performance of
17 their breach and their breach is the failure to have
18 made a FRAND offer.

19 Now as to Your Honor's question or comment about
20 FRAND being complicated, undoubtedly that's true. The
21 courts though, of course, make complicated
22 determinations of value all the time. Courts make
23 determinations of the value of a human life, which is
24 arguably much more nuance more complicated question than
25 this. The courts make --

1 THE COURT: Oh, I'm not saying that. It's just
2 that I want to know, if I go through that process, that
3 I'm doing it for the right reason.

4 MR. POWERS: Our view, Your Honor, is you're
5 doing it for the right reason for two reasons: One, in
6 our view the law supports -- indeed would suggest that's
7 exactly what you should do. As Your Honor said in the
8 motions in limine order, this is the type of situation
9 where specific performance is probably the only relief
10 that can be given and the analysis by Judge Robart in
11 Washington is quite the same saying somebody has to
12 decide it. It really has to be the court. No one else
13 is going to decide what is or isn't FRAND. And so the
14 law -- I'm sorry.

15 THE COURT: I'm sorry. The benefit to you
16 would be, as I understand it, that Motorola would not be
17 able to bring an infringement action against you.

18 MR. POWERS: The second point I was going to
19 make, I think the benefit is this: Mr. Swedlow is
20 right, that the parties have been at loggerheads for a
21 long time in negotiations. In our view, the principal
22 stumbling block to those negotiations being successful
23 is Motorola's refusal ever, ever to move off of what we
24 believe is not a FRAND offer, which is 2.25% of the
25 entire value of an iPhone or an iPad. And once Your

1 Honor sets the FRAND rate, our view is that will break
2 the logjam and the parties will then --

3 THE COURT: But you don't know that.

4 MR. POWERS: I do not know that. No one can
5 promise that. But that's what the law in our view
6 respectfully says is the job of the Court. The Court
7 has a claim for relief of breach of contract where there
8 is a contract, and where that contract required a FRAND
9 offer to be made. If we are right that a FRAND offer
10 was not made, that is a breach. And if we are right and
11 if Your Honor was right in your motion in limine ruling
12 that specific performance is really the only way to
13 solve a breach of that type, which I think is logically
14 almost undeniable, then Your Honor's work is done for
15 this case.

16 I can't promise, Motorola can't promise that there
17 won't be any other lawsuit. They could bring a lawsuit
18 on nonessential patents. The goal of this lawsuit -- or
19 put differently: This lawsuit is not a nullity and Your
20 Honor's work is not for naught based on whether another
21 lawsuit is or is not ever brought. This lawsuit has a
22 purpose, a function based on the claims before it.
23 Those claims ask to rectify what in our view is a clear
24 breach of contract.

25 As Your Honor said in the MIL ruling, that's the

1 right remedy for a breach of that type, and then in our
2 view Your Honor's work is done. My belief, but I
3 obviously cannot make a guarantee, is that I said it is.

4 THE COURT: Well, it's just that usually in
5 deciding a breach of contract, you say okay, the plumber
6 didn't do the work. He can't collect the money. That's
7 the end. Or whatever. Here if I'm just saying well, I
8 don't think this is the right amount, I think it should
9 be this amount. Go back and see what you can do again.
10 It's just rolling the ball down the road a little bit.
11 It's not deciding the case and ending it.

12 MR. POWERS: With respect, Your Honor, I think
13 it is completely and fully deciding the case before you,
14 which is the breach of contract. It is completely and
15 fully deciding that case.

16 THE COURT: The real oddity in this case is
17 that you've decided you don't want money damages, which
18 is the normal remedy for a breach of contract.

19 MR. POWERS: It's a normal remedy, but --

20 THE COURT: Then you've got the other point,
21 which I don't want to get into now, but Motorola
22 certainly has been pushing, which is that damages are
23 the normal remedy. Anything else is extraordinary and
24 you have to make a showing that an extraordinary remedy
25 is what you are entitled to.

1 MR. POWERS: Agreed. And that we thought had
2 been resolved in Your Honor's motion in limine ruling
3 where your comment, we thought, was directly on point,
4 which is in a breach of this type -- I think your words
5 were something along the lines of "indeed specific
6 performance may be the only type of remedy that is
7 appropriate."

8 THE COURT: I was laboring under a
9 misapprehension which is that you would take the rate
10 that I determined, and then when I got the response to
11 the motion for clarification, I thought oh, this is a
12 little different from what I had thought it was.

13 MR. POWERS: And we may very well, depending
14 upon your ruling. But I believe, Your Honor, that
15 whether the remedy should be given should not be decided
16 based on whether that resolves other potential
17 litigations. I mean the plumber example is a good one.
18 Perhaps you order specific performance that that plumber
19 has to go in and do the work because that plumber is
20 unique and needs to go and fix the pipes. And perhaps
21 the plumber doesn't fix them well or the plumber is late
22 and there's another litigation about whether the
23 plumber's work was shoddy or negligent. None of that is
24 precluded, but that doesn't mean that your order of
25 specific performance that the plumber go perform the

UNITED STATES DISTRICT COURT

FOR THE WESTERN DISTRICT OF WISCONSIN

* * * * *

APPLE, INC.,

Plaintiff,

-vs-

Case No. 11-CV-178-BBC

MOTOROLA MOBILITY, INC.,

Madison, Wisconsin

November 5, 2012

Defendant.

9:00 a.m.

* * * * *

STENOGRAPHIC TRANSCRIPT OF FIRST DAY OF COURT TRIAL
HELD BEFORE DISTRICT JUDGE BARBARA B. CRABB,

APPEARANCES:

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Madison, WI 53703 (608) 255-3821

1 be bound, but I think it starts to make clear what their
2 real motivations are. They want it one way.

3 THE COURT: Thank you.

4 MR. SWEDLOW: Can I briefly respond?

5 THE COURT: Um-hmm.

6 MR. SWEDLOW: The problem -- let me start with
7 the third and come up to the first. Like we have said,
8 Motorola is interested in resolving this dispute
9 completely. If that would be in the form of binding
10 arbitration with a mutually selected arbitrator or panel
11 of arbitrators who have licensing experience that may be
12 relevant to that and both portfolios are placed at issue
13 and that arbitration leads to a cross-license with both
14 parties being bound to either pay or collect and the
15 geography is defined and all the terms are in there so
16 that somebody will pay somebody, we would love that.

17 The problem is where we are now before you on this
18 breach of contract claim is not the hypothetical where
19 ETSI said it's a dollar. Because if ETSI said --
20 obviously Apple would accept a dollar because it's
21 ridiculously low. But let's say they said it was \$10 or
22 let's say they said it was 2.25% in value or whatever
23 ETSI had said to set a rate, you know from your orders
24 that ETSI has said that is a -- the rate is a commercial
25 term to be negotiated between the parties and we're not

1 setting any rates. That's what the ETSI entity as a
2 party to this contract has said.

3 If the rate was \$10 and that was our contract with
4 ETSI, we get \$10, and Apple came into this court and
5 sued you to get specific performance for \$10, then they
6 would have to pay when they win the case. They'd have
7 to give us \$10. And Apple doesn't want to be bound to
8 pay unless we agree to something else or the rate is a
9 dollar, and then of course they would pay because that's
10 so low they'd be a fool not to pay.

11 So option one is where we were on Friday -- it
12 seems like a long time ago -- but where we were on
13 Friday where if Apple won't agree to pay, then specific
14 performance isn't a discretionary remedy that leads to a
15 resolution.

16 Option two. We don't have -- we can't and won't
17 agree to a methodology without Apple's patents being
18 part of the process for deciding that methodology. You
19 heard a lot about a lot of different kinds of
20 methodologies that could be used to both value and pay
21 on the portfolio: Lump sum; patent counting; looking at
22 the actual technology; looking at comparable licenses
23 for Motorola's portfolios; looking at licenses that two
24 parties have with each other that somehow relate to
25 Motorola's portfolio. If the methodologies consider

1 everything you could possibly consider, we'll agree to
2 that. But that's not a methodology, that's just
3 deciding what a portfolio is worth.

4 So if what we're really talking about is option
5 three, then we would agree to -- this Court on the
6 current complaint doesn't have before it the right
7 posture to set a cross-license for patents that aren't
8 at issue and patents that are only at issue in a breach
9 of contract context. But we would be willing to go
10 somewhere and have it be binding that all of Motorola's
11 standards-essential patents and all of Apple's
12 standards-essential patents would be cross-licensed and
13 a net payment would be determined. We would love that.

14 THE COURT: When you say you would be willing
15 to go somewhere, what are you talking about? Going to
16 binding arbitration or trying this case in six months?

17 MR. SWEDLOW: Either. You don't have that case
18 before you so we have to construct something that
19 becomes that case and putting it before you.

20 THE COURT: And that's definitely a problem in
21 my mind. Apple had -- has had 20 months to construct a
22 case and here we are gathered for trial and it's trying
23 to expand that case.

24 MR. SWEDLOW: The complaint you have now is a
25 breach of contract claim, and if we didn't breach that

1 contract, then there's no breach and there wouldn't have
2 to be a remedy of specific performance with a
3 cross-license and all the other stuff. So the current
4 complaint that you have is not the right complaint to do
5 that. The question would be if we're going to do that
6 in binding arbitration, which we would agree to, or
7 before Your Honor, we have to place what it is, option
8 three is that Apple has described before you. There
9 were three conditions with respect to that which we can
10 address. I think we can probably figure out how to
11 solve those conditions so we could agree, but that's not
12 -- that's not this case. That would be a different case
13 that you could resolve.

14 THE COURT: That's exactly --

15 MR. POWERS: May I respond briefly, Your Honor?

16 THE COURT: Um-hmm.

17 MR. POWERS: It sounds as if we've finally
18 gotten Motorola to agree it would agree to option three.
19 And then the only question --

20 THE COURT: But not necessarily in this case.

21 MR. POWERS: Well, that's what I was just about
22 to address. I think that's the simplest thing we have
23 before us. That would just involve a motion to amend by
24 both sides the claims before you slightly to add that
25 half of the equation to it. That mechanically is quite

1 simple.

2 THE COURT: And what about the proposal for
3 binding arbitration?

4 MR. POWERS: That hasn't been raised before, at
5 least with me. We'd obviously have to talk about it.
6 Our suggestion is that we follow option three, if that
7 is, in fact, the option that Motorola will agree to and
8 if Your Honor would agree to it. As I say, mechanically
9 that's a simple amendment to the complaint and
10 counterclaim.

11 THE COURT: Well, it is, but I have some real
12 reluctance to let you amend a complaint at this point.
13 You've had a chance to make a case on the claims that
14 you raised and that you amended and I don't think that
15 you've made that case.

16 MR. POWERS: Well, with respect, Your Honor, I
17 believe we've made the case in spades with regard to
18 whether there's a breach, and I think the dispute that
19 came up on Thursday -- Wednesday was what scope of
20 relief would be permitted, and that was an issue raised
21 for the very first time by Motorola at that time.

22 THE COURT: I assume you mean that you have --
23 you have at least alleged a case for breach of contract.

24 MR. POWERS: Certainly.

25 THE COURT: You certainly haven't made the

1 case; right?

2 MR. POWERS: We've stated what the case would
3 be in the trial brief, for example. We've obviously not
4 put in any evidence. Of course you're correct. But I
5 believe the case as laid out in the trial brief and in
6 the expert reports and as has been prepared and ready
7 for trial, would, when you heard the evidence, make the
8 case in spades. And what's been debated for the last
9 three days is not that, but what scope of relief
10 ultimately should be given. And where all this arose
11 was not a last minute request from Apple, but a last
12 minute change from Motorola where it was asking for
13 affirmative relief that it had not pled. It was asking
14 that on a claim where Apple was saying make specific
15 performance to order them to make an offer, which was
16 completing their contract with ETSI, Motorola then asked
17 for an order from the Court affirmatively ordering Apple
18 to accept that order, which is outside the pleadings and
19 outside the contract.

20 THE COURT: And I explained why I didn't think
21 that that -- as I now understand the request, that that
22 was something that a court should do. And I'm thinking
23 about that a lot, and perhaps thinking about it in the
24 sense that I could say yes, this offer was within FRAND
25 terms; no, it wasn't, and just leave it at that. But

1 We have to go file 500 patent infringement patent
2 lawsuits to collect on all 500 patents? Because in a
3 patent infringement case, the current law is you can't
4 collect on patents that aren't actually in the case. So
5 we have to put all our patents into a case. Apple has
6 said if you set a rate of, let's say, \$10, we're not
7 going to pay. But if you set a rate at \$1, you still
8 can't make us pay, but we'll voluntary pay. That's why
9 we wound up here. Because Apple dropped its claim for
10 damages. Any number you would select is an option, as
11 they said, but that isn't -- in your discretion for
12 declaratory relief giving Apple an option to take or
13 leave a rate, even if it's \$1, they only said they would
14 voluntary do it. They're not actually agreeing to be
15 bound.

16 It isn't before you. So if we amend the complaint,
17 it would have to be something totally new where the
18 parties say Judge Crabb is going to be able to decide a
19 rate, whether or not Apple -- whether or not Motorola
20 breached, and we're going to show you all of Apple's
21 patents and figure out what the net value of the two
22 portfolios would be, and whatever number you determine
23 and however we're supposed to pay it, whoever pays it
24 has to pay it. That's not an amendment of the
25 complaint. It's for sure something we would like to do

1 in binding arbitration or here, but it isn't the context
2 of just changing the complaint so this complaint adds
3 another claim.

4 THE COURT: Okay. We'll take 15 minutes.

5 (Recess 10:30-11:10 a.m.)

6 THE CLERK: This Honorable Court is again in
7 session. Please be seated and come to order.

8 THE COURT: Now I've said several times that I
9 really can't figure out any way that Apple has been
10 injured that could be redressed by the request that
11 Apple has made for relief in this case.

12 Mr. Powers, we've gone over this a lot, but just
13 how would an order declaring that Motorola breached its
14 contract with ETSI by its initial FRAND offer help you?
15 What specific help would it give you other than a
16 bargaining chip or an affirmative defense against
17 infringement cases?

18 MR. POWERS: I guess I would have two answers,
19 Your Honor. First is that it would be appropriate
20 relief for the claim that's been brought. And I would
21 reiterate --

22 THE COURT: What's the injury and what would be
23 the redress?

24 MR. POWERS: Well, okay. Injury is a separate
25 question. The injury that we've suffered is that we've

1 been subjected to litigations all over the world and
2 threats of additional litigations all over the world
3 that we should not have been subjected to, if, in fact,
4 they had made a FRAND offer back in 2007 or 2010. And
5 if we had accepted that offer, we would have been
6 licensed. All of those litigations and all of those
7 threats of litigations would not have occurred. The
8 fact that we have decided not to seek damages for that
9 does not mean that we haven't been injured. So those,
10 you obviously have to keep those as separate categories.

11 And the injuries I think have been clear. We've
12 been subjected to litigation and threats of litigation
13 that are improper. They are improper because a party to
14 a standard-setting body agrees to make an offer that is
15 FRAND so that anyone practicing the standard can
16 practice without fear of litigation or exclusion. That
17 is the whole purpose of a standard-setting body. And if
18 we're right about breach, then in our view your
19 declaration of what is FRAND, if that's the only relief
20 you grant -- obviously if you order a specific
21 performance or if you go further as the way we've asked,
22 your relief is then more effective. But if all that you
23 do is to declare that their breach was FRAND and if you
24 don't declare what FRAND is, then that is obviously less
25 effective than declaring what FRAND is. But the measure

1 no jurisdiction for that case.

2 MR. POWERS: I specifically assumed
3 jurisdiction, but yes, I understand.

4 MR. SWEDLOW: I just want to point out I have
5 an Android phone, not an iPhone.

6 MR. POWERS: At that point, if you decided that
7 the fair market value of that phone was \$150, that
8 doesn't -- that's not a bargaining chip. That's the
9 offer I get. I accept it or I don't. If I thought the
10 fair market value of that was \$50 and it's not worth
11 \$150, I don't buy it. But you have done what the law,
12 in my view, would require, which is to force Mr. Swedlow
13 to make an offer at an amount and then I accept or not.
14 That's completing the contract. I then --

15 THE COURT: You're not going to walk away from
16 this, Mr. Powers. If I tell you that the amount is
17 \$10.12, you're not going to accept it, but you're not
18 going to walk away. That's not the end of the matter.
19 You still want a licensing agreement with Motorola, and
20 you've got all kinds of reasons for that. It's just one
21 step.

22 If I tell you that your option is your telephone or
23 your option or whatever is \$150, that's the end. Yes,
24 you walk away. You pay it. Whichever. But that's not
25 what we're talking about here. We're talking about

1 something that is still very fluid, very much in
2 dispute. It's going to go on and on and on.

3 My giving you one number out of a whole mass of
4 other things that have to be decided is not going to get
5 you -- that's not going to resolve this case.

6 MR. POWERS: None of us knows that for sure.
7 Your Honor is clearly correct that there are a number of
8 factors at issue. But it is our view, the reason we
9 brought this case -- we didn't bring this case because
10 none of us had anything else to do. We brought this
11 case because we believed setting that number would do
12 something meaningful to resolve the dispute.

13 THE COURT: And --

14 MR. POWERS: That's why we did it.

15 THE COURT: -- I disagree with you. I am going
16 to dismiss it. Now the Court of Appeals may have an
17 entirely different view of it, and that's fine.

18 MR. POWERS: I assume it's dismissed without
19 prejudice.

20 THE COURT: Oh, no. It's dismissed with
21 prejudice.

22 MR. POWERS: We have a bench memo to give you
23 on that subject because the law, particularly --

24 THE COURT: I'll certainly -- and I will issue
25 a written opinion and then if you want to make motions

1 for reconsideration of any aspect of it, if you want to,
2 I will look at your bench memo on prejudice or no
3 prejudice.

4 MR. POWERS: May I approach?

5 THE COURT: Certainly. Thank you. This is not
6 the resolution that I would have thought we would --
7 where we would be months ago when this case was under --
8 was being developed and when I decided the motion for
9 summary judgment and all the others, but I simply cannot
10 see my way to spending court resources to reach the
11 result that Apple wants. I still have not been
12 convinced that there is any injury that will be
13 redressed by the request that Apple has made for relief.

14 So I will get a written opinion out promptly. Of
15 course you can always file motions for reconsideration.
16 And of course you may take an appeal. Thank you all.

17 (Proceedings concluded at 11:36 a.m.)

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CERTIFICATE OF SERVICE

I hereby certify that on January 16, 2014, I caused the Nonconfidential Joint Appendix to be electronically filed with the Clerk of the Court using CM/ECF, which will automatically send email notification of such filing to the following counsel of record:

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